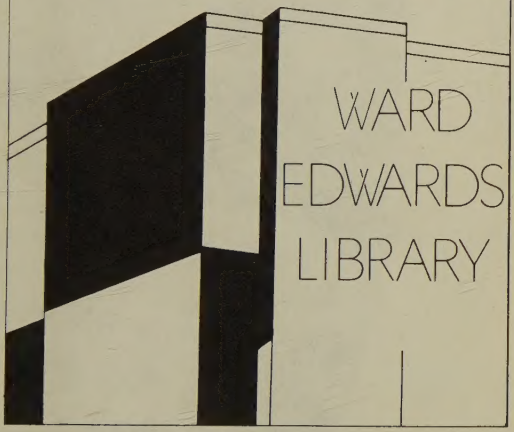
State Teachers College
Warrensburg, Mo.
Class 372.4 Book St 71
Accession 29658 c.5



CMSU
WARRENSBURG, MISSOURI

SILENT AND ORAL READING

A PRACTICAL HANDBOOK OF METHODS BASED ON THE MOST RECENT SCIENTIFIC INVESTIGATIONS

BY

CLARENCE R. STONE

PRINCIPAL OF THE GARDENVILLE SCHOOL, ST. LOUIS
INSTRUCTOR IN THE PSYCHOLOGY AND PEDAGOGY OF READING
HARRIS TEACHERS COLLEGE, ST. LOUIS

PROPERTY OF
CENTRAL MISSOURI
STATE UNIVERSITY
Warrensburg,
Missouri

HOUGHTON MIFFLIN COMPANY
BOSTON NEW YORK CHICAGO SAN FRANCISCO
The Riverside Press Cambridge

COPYRIGHT, 1922, BY CLARENCE R. STONE

ALL RIGHTS RESERVED

PROPERTY OF
TEACHERS COLLEGE
WARRENSBURG MO.

The Riverside Press
CAMBRIDGE · MASSACHUSETTS
PRINTED IN THE U.S.A.

1573
S84
c.5

EDITOR'S INTRODUCTION

THE study in teaching method in one of the fundamental elementary-school subjects, represented by the present volume in this series of textbooks, is a product of the new scientific study of education which in the past decade has begun a complete reorganization of our teaching procedure. It represents a new type of procedure in teaching method, the emphasis being shifted from theorizing about the teaching of reading to accurate determination of progress in the different elements that enter into the acquiring of the fundamental and rather difficult art of learning to read, and to use reading as a tool. The emphasis, too, is placed on training for intelligent silent-reading and the analysis and comprehension of what is read rather than on oral and expressive reading, though directions as to this latter are not left out.

The author has set forth, in simple language and free from technical terminology, the essential results obtained from the scientific laboratory studies of reading which psychologists have in recent years been making, and which throw such a flood of light over teaching procedure in reading work. With these studies and results from the new pedagogical tests as a basis, the author has set forth in the chapters which follow the essentials of sound reading method, both for beginning and upper-grade work; has explained and illustrated how to train pupils for good work in silent reading, and set forth its importance in the process of learning to read; has shown how teachers and principals may test and measure reading progress, by means of the new scientific tests which have recently been evolved; and has made clear, from actual classroom results, how much the teaching of

29658

reading is an individual and special problem, frequently calling for individual diagnosis and remedial treatment.

The contents of this volume ought to be the common property of all elementary-school principals and supervisory school officers who have supervisory oversight of elementary-school work, and be used by them as a basis for their supervision of the elementary-school work in reading. It ought also to be used by students in normal schools and teacher-training institutions in connection with the work in teaching methods and training-school practice. It would also form a very profitable study for teachers in service in connection with Reading-Circle study. Its simple style, absence of technical procedure, and very practical application to schoolroom procedure all combine to make it an unusually useful book for the classroom teacher to read and to follow.

ELLWOOD P. CUBBERLY

PREFACE

About ten years ago, during my early experience as a supervising principal, I became convinced that the methods in common use in the teaching of reading in the middle and upper grades were much less effective than the methods in common use in the other subjects. Ever since, I have been specially interested in making a careful study of methods in reading and in devising and trying out a variety of plans. My interest in the development of the technique of handling silent-reading lessons was aroused by writings and lectures of Dr. Charles H. Judd, to whom I desire to make acknowledgment.

I wish to acknowledge a debt of gratitude to the St. Louis teachers who have so faithfully coöperated with me in the development of methods and devices. Miss Mary Coogan, Miss Jane Gilbert, Miss Lucile Murphy, Miss Annette Buehrmann, and Miss Agness Dunsford should be specially mentioned. Teachers do not readily realize that their supervisors and principals are continually learning from them. I am also grateful to Mr. Charles Collins for important suggestions for the improvement of the vocabulary and phrasing in the early chapters, to Miss Helen DeWerthern for helpful suggestions on the section on the primary grades, and to my wife, Mrs. Anne Lotter Stone, who has given encouragement and helpful criticisms throughout the preparation of the manuscript. Acknowledgment is given in the text to the authors and publishers for permission to reproduce excerpts and illustrations.

Clarence R. Stone

30802
280

CONTENTS

CHAPTER I. PROBLEMS IN READING INSTRUCTION . . 1

The present situation — The outlook — Oral and silent reading — Specific aims — Testing — Content — Motivation — Vocabulary — Appreciation and application.

Suggestive exercises.

CHAPTER II. PRACTICAL CONTRIBUTIONS TO THE READING PROBLEM FROM PSYCHOLOGICAL AND EDUCATIONAL RESEARCH 6

Questions for consideration — Sources for conclusions.

1. STUDIES AS TO EYE-MOVEMENT.
   Importance of eye-movements — Good and poor eye-movements contrasted — Regressive movements and periods of confusion — Longer units per eye-pause — Growth stages for three eye-movement habits — The eye-voice span — Summary of characteristics of mature eye-movement habits.
2. RATE AND COMPREHENSION.
   Rapidity and comprehension — A simple experiment — Conclusions as to rate and comprehension — O'Brien's conclusions as to the effect of increased speed upon the comprehension.
3. OTHER FACTORS AFFECTING SILENT READING.
   The rate of silent reading — Factors in the development of speed — Standards in rate of reading — A comparison of the O'Brien, Gray, Courtis, and Starch rate norms — Oral and silent reading — Vocalizing and inner speech — Articulation and comprehension — Articulation and rate — Visual perception in reading — Subjective and objective readers.

   Some facts you should know — Problems for study and discussion.

CHAPTER III. TEACHING READING IN THE PRIMARY GRADES 33

1. GENERAL STATEMENT AS TO AIMS AND METHODS.
   Relative value of oral and silent reading — Importance of oral reading in the lower grades — Oral reading and poetry — Social values of oral reading — Minor values of oral reading — General statement of aims and outcomes.

2. Problems of the Beginning Stage.
Early primer methods — The simple-story primer — Other slow-approach primers — Blackboard steps — Difficulty with the slow-approach type of primer — The Mother-Goose type of primer — The nursery-rhyme type of primer — Summary of conclusions regarding primers — Relating introductory reading matter to the children's environment — Sample primary reading lessons — Pupil initiative in beginning reading — Phonics.
3. The Oral-Reading Stage.
The primary stage an oral-reading stage — Rate in oral reading — Errors in oral reading — Expression of the meaning — The main problems of the second and third grades — Two types of oral reading — Phrase-flashing — Audience reading.
4. Silent Reading.
First grade — Second grade — Extensive reading in the second and third grades — Emphasize comprehension — The too-slow group — Increasingly larger thought units — Vocabulary.
Problems for study and discussion.

CHAPTER IV. Teaching Reading in the Intermediate and Upper Grades 64

1. In the Intermediate Grades.
Radical change in method — Emphasis on content and major values — Word-study — Extensive reading — Training in silent reading and study — Individual differences — Reclassification on basis of individual needs — Oral reading — Summary on intermediate-grade work in teaching reading.
2. In the Upper Grades.
Speed development in the upper grades — Variability in reading attainment within upper-grade classes — Extensive silent reading — What shall be the criterion for choosing literary units? — The problems of difficulty and amount — Readings in community and national life — Oral reading — Summary on upper-grade work in teaching reading.
Problems for study and discussion.

CHAPTER V. Appreciation and Memorization . . . 80

1. Developing Appreciation.
Why we have failed in awakening appreciation — The nature of appreciation — Appreciation of social values — Appreciation of æsthetic values — Appreciation of the humorous — Appreciation of nature — General method for the appreciation lesson — General suggestions as to developing appreciation — Cautions.

2. The Teaching of Poetry.
A perspective view of the whole — Study by parts — A new experience of the whole.
3. Memorization.
Method in a memorization lesson — Close association of meanings — The method of the whole superior to the method by parts — Combining the two methods — Memorizing a selection — Recall as a factor in memorizing and retaining — What to memorize — Lists of poems by grades, for memory work — Caution in selecting poems — The number of poems required to be memorized.
Problems for study and discussion.

CHAPTER VI. Securing the Audience Situation in Oral Reading 99

Types of oral reading.
Types of Audience Reading.
Miscellaneous audience reading — Group-to-group audience reading — Conducting the group-to-group recitation — Suitable books to use for such reading — Dramatic reading — Topical audience reading — The "cut-up story" — Illustrated audience reading — Reading to the pupils.
Problems for study and discussion.

CHAPTER VII. Content Silent-Reading Lessons . 112

1. Need for Change in Reading-Recitation Procedure.
A poor type of reading-lesson procedure — Why beginning teachers fall into such practices — Over-emphasis of oral reading.
2. Oral vs. Silent Reading.
What proportion of the reading time in each grade shall be given to silent reading — Essential differences between the oral- and the silent-reading lesson — The silent-reading method is more than training exercises — When to use the oral- and when the silent-reading method — Silent-reading lessons classified.
3. Planning the Silent-Reading Lesson.
Stress the larger values — The problem method — Characteristics of good problems — Assignments — Definite assignments — Formulation of problems by the pupils — Importance of problem formulation.
4. Illustrative Silent-Reading Lessons.
A fourth-grade silent-reading lesson — Another fourth-grade lesson — A series of fifth-grade silent-reading lessons on

Some Merry Adventures of Robin Hood — A poor way to proceed — Silent reading and study — A seventh-grade silent-reading lesson — Statement of the problem — Solution of the problem — Value of such a lesson — A series of five eighth-grade recitations on *The Man Without a Country* — Provide an abundance of red-blooded silent-reading material.

5. Lists of Books suitable for Use.
Books as interesting as a dime novel — Lists of books suitable for class use, by grades — Silent-reading selections, by grades.
6. Problems of Illustrative Representation.
Types of illustrations — Purposes — Correlation with drawing — Lesson steps — Illustrating *Rip Van Winkle* — Units suitable for illustration.
7. Problems relating to Dramatization.
An example of such work — Value of dramatization — What not to dramatize.
8. Plans for Individual and Group Reading.
Group work in silent reading — Special plans for grouping — Individual silent reading — A fourth-grade individual silent-reading lesson — Use of the room library.

Problems for study and discussion.

CHAPTER VIII. Training Lessons in Silent Reading . 161

Content and training lessons contrasted.

1. Devices for increasing Rate.
Phrase-flashing — Reading under a time limit — Timing the pupil's reading — Time records on reading outside of recitation — Re-reading for increase of rate — Skimming — O'Brien's three types of training for speed.
2. Plans for improving Comprehension.
Action sentences and directions — Silent reading and reproduction — Three main forms of reading for comprehension.

A. Reading to answer factual questions.
In connection with the cumulative story — In connection with informational material — An experiment in factual comprehension.

B. Reading to answer relational or problem questions.
Training in relational thinking — Proper statement of relational questions — Considering meaning of words — Verifying answers by careful re-reading — Improving the ability to think logically in reading and study — A training exercise using the geography — A silent-reading exercise with a history text — Substituting silent for oral reading in grammar exercises.

C. Training in comprehension of the organization of what is read.

Summing up paragraphs of exposition in study recitation — Making a topical outline of a selection — Grouping paragraphs — An eighth-grade lesson in outlining — Making running notes — Making and matching paragraph headings; group work — Training in reading headings in texts and newspapers — Analyzing short and long narrative units — Training in quickly grasping the central thought or the essential total meaning of a unit.

3. Plans for Vocabulary Training.
How we enlarge our vocabulary — Vocabulary-problem lessons.
I. *A vocabulary lesson on "The Bells," by Poe; seventh grade.*
II. *A sixth-grade vocabulary-problem lesson.*
Systematic word-study — Vocabulary exercises in the Lewis and Roland *Silent Readers.*

4. The Latest Types of Silent-Reading Exercises.
A. Motivated drill work in third-grade silent reading.
B. Exercises developed at Detroit for making reading function.
C. Silent-reading exercises developed at Cedar Rapids and Iowa City.
D. Types of remedial training work reported by C. J. Anderson and Elda Merton.
Listing words according to ten phonetic rules — Drilling on phrases — Flashing of phrases — Building up meaning vocabularies — Using paragraph cards with specific questions on the back.
Some points to remember — Problems for study and discussion.

CHAPTER IX. Reading Tests and their Use in Improving Reading 217

1. Oral-Reading Tests.
Gray's oral-reading test — Advantages of this test — Limitations of the test — The Jones vocabulary test.

2. Hearing-Reading Tests.
How to test the listening powers.

3. Testing Silent Reading.
A. Factors to consider in selecting reading test.
Necessity of using several tests.
B. The Monroe Standardized General Survey Silent-Reading Tests.
The content and the type of response in the Monroe tests — The rate and comprehension scores — Possible criticisms of the Monroe tests — Evaluation of the Monroe tests.

C. Scale for Measuring Ability in Silent Reading, by May Ayers Burgess.
Similarities to the Monroe tests — Essential characteristics of the Burgess tests — The Burgess theory of measurement — The pupil's score — What the Burgess scoring plan does not reveal — Evaluation of the Burgess tests.
D. The Stone Series of Narrative-Reading Tests.
The preparatory test and the real test — How the rate is measured — Stone's measure of comprehension — The diagnostic chart — The cost of the tests.
E. The Courtis Silent-Reading Test.
The content — The rate test — The comprehension test — Comments on the Courtis test.
F. The Thorndike and the Thorndike-McCall Scale for Measuring the Understanding of Sentences.
The Thorndike scale — Evaluation of the scale.
G. The Haggerty Reading Examinations.
The test for the primary grades — The Haggerty reading examinations for the intermediate and upper grades.
4. Vocabulary Tests.
The Thorndike Visual Vocabulary Scales — The Holley Sentence Vocabulary Scale — The Pressey-Skeel group test for measuring reading vocabulary in the first grade — The value of a group-vocabulary test in the primary grades.
An adequate equipment of reading tests.
5. How Results are improved through the Use of Tests.
Reading tests as used in one school — The test repeated a year later — Conclusions from this study.
6. Tests with Material at hand.
Testing neglected — An improvised second-grade silent-reading test — Tests provided for in readers — The Bolenius *Readers* tests — Evaluation of the Bolenius tests — Difficulties in testing problematical thinking in reading.
I. A fourth-grade silent-reading test.
Questions and answers — Criticism of the test and questions — A better test by the same teacher on the same selection — Score values of questions in reading tests.
II. A fifth-grade silent-reading test of both rate and comprehension.
Measuring the rate — Measuring the comprehension — Comprehension questions on *The Magic Mask.*
Summary of conclusions regarding testing in reading.
7. Use of Reading Tests in Rural Schools.
Factual questions — Problems for study and discussion.

CHAPTER X. Individual Differences, and Special Individual and Group Instruction . 282

Individual differences in reading ability.

1. Individual Differences among Eighty Sixth-Grade Pupils.
   A study of variability — What these tables show — Special classification for reading.
2. Special Grouping within a Room.
   Individual differences in rooms.
   I. Two seventh-grade classes regrouped for reading.
   Classwork after regrouping.
   II. Two fourth-grade classes regrouped for reading.
   Needed treatment of the problem presented.
   III. How to handle the reading in a specially regrouped second-grade room.
   Using reading tests — The reading work of the upper group — The work of the slow group.
3. The Reading Problem in the Special or Ungraded Room.
   Remedial instruction — Types of remedial cases — Specific causes of failure in reading — Individual differences in rural schools.

Problems for study and discussion.

SELECTED BIBLIOGRAPHY 297

INDEX 299

LIST OF FIGURES, TABLES, AND PLATES

FIGURES IN THE TEXT

1. Eye-pauses in oral and in silent reading of a sixth-grade pupil 7
2. Silent reading by a good reader in the seventh grade . 10
3. Silent reading by a poor reader in the seventh grade . 11
4. Silent reading by a slow reader in the fourth grade with a poor quality record 12

4a. Growth stages for average number of fixations per line 13

5. Eye-voice span of a good second-grade reader. Eye-voice span of a poor second-grade reader 14
6. Per cent of 1831 Cleveland pupils found in each of nine speed and quality groups in silent reading 17
7. Rate standards in silent reading 22
8. The average rate for pupils after training in rapid reading, as compared with norms reported by Courtis and Gray for ordinary readers 23
9. Improvement in rate of articulation and in rate of recognition of printed words in successive grades . . . 25
10. Diagrams illustrating connection between oral symbols, visual symbols, and meaning 34
11. O'Brien's graphs showing the average gain in rate for grades IV to VIII, as determined by the Courtis Silent-Reading Test 73
12. Comparison of the amount of oral and silent reading advisable in the various grades 116
13. Directions for recording errors in the Gray Oral-Reading Test 221
14. Samples of the Monroe Silent-Reading Tests — I . . 226
15. Samples of the Monroe Silent-Reading Test — II . . 227
16. A sample unit of the Burgess Silent-Reading Scale . . 230
17. An exact reproduction of the first part of the Courtis Silent-Reading Test 237
18. Sample exercises of the Thorndike Reading Tests . . 241
19. Samples of the Haggerty-Noonan Reading Examination 243, 244

20. The Thorndike Visual Vocabulary Scale 247
21. The Holley Sentence Vocabulary Scale . . 250, 251
22. Graphs for the Monroe Silent-Reading Test . . . 256

TABLES

I. Standards in rate of silent reading 21
II. Comparison of the Monroe and Gray rate standards . 229
III. Credit corresponding to each number of paragraphs marked in each grade 233
IV. Showing records of sixth-grade classes in Monroe-Silent Reading Tests, May, 1920 283
V. Data for regrouping two seventh-grade classes in reading 286
VI. Data for regrouping two fourth-grade classes . . 289
VII. Record of poor readers in an ungraded room . . . 292

PLATES

I. Eye-pauses of six different individuals in reading . . 8
II. Sample blackboard lessons 40
III, IV. How a story may be illustrated 150, 151

SILENT AND ORAL READING

CHAPTER I

PROBLEMS IN READING INSTRUCTION

The present situation. School people are generally agreed that the results in reading in the primary grades are much more satisfactory than the results in the middle and upper grades. There has been a definite end in view in the primary grades. The child enters school able to speak and understand a considerable vocabulary. The problem of the primary teachers is to train him to read this vocabulary. It is generally agreed that this has been fairly well done. However, it is being seriously questioned whether the primary grades are doing all that they should in training for efficient silent reading. Above the primary grades there has not been a very definite understanding as to what specific values, aims, and outcomes should be realized from the reading instruction. There has been a vague attempt to develop appreciation of literature, but there is a rather general agreement that this has not been very successful. For over a decade the psychologists have been pointing out the dangers of over-emphasizing oral-reading and neglecting silent-reading instruction. Yet, by far the most common type of reading instruction found in the schools to-day in the middle and upper grades is the stereotyped oral-reading lesson.

The outlook. The scientific studies in education in the last decade and the reports of progressive teachers and supervisors give promise of a gradual modification of the manner of conducting reading recitations in the middle and

upper grades. In lectures and writings the importance of silent reading is being emphasized. But teachers have been so accustomed to the oral-reading method that they are at a loss, as a general rule, to know how to conduct a silent-reading lesson. It is the purpose of this chapter to set forth some of the problems facing the teachers in securing better results in reading instruction.

Oral and silent reading. One of the problems perplexing teachers is how to conduct effectively the silent-reading lessons. Some even advocate that we should abandon the commonly used plan of having the pupils of a class all read the same material, and suggest that the reading should be placed upon an individual basis rather than upon a class basis. However, very little in the way of specific suggestions as to the handling of this type of reading instruction has been published. The teacher is also confronted with the problem as to which particular units of reading material available are adapted to the silent-reading method and which to the oral-reading method. Or, to state the problem in another form, we find the teacher confronted with the question as to whether she should use the oral or silent method in teaching a particular unit of subject-matter. We are told, as a result of our school surveys, that a large portion of our middle- and upper-grade pupils read too slowly, and that they do not adequately understand what they read. The problem of increasing the rate of reading of many of the pupils and improving their comprehension is a serious one for our schools, and the teacher needs specific technique in aiding her to conduct effectively silent-reading exercises for training purposes. As to just what the primary grades should do in regard to silent reading is also important.

It is also essential that we consider what the legitimate values and outcomes of oral reading are. We need to know

the relation of oral reading to silent-reading habits. Teachers are also asking what should be the proper division of time between oral and silent reading. The usual plan of oral reading is to have one pupil read aloud while the others read the same material silently. Some have advocated that this plan should be abandoned because it furnishes little opportunity for an audience situation. It is proposed that the oral reader have a real audience without the text in hand. We need to evaluate carefully both methods. Teachers need devices for conducting audience reading.

Specific aims. It is generally recognized that there are three rather distinct stages of development in the first nine grades, the primary, the intermediate, and the upper grade or Junior High School stage. It is important that there should be a clear and detailed statement of the specific aims to be realized in each of these stages in reading instruction, that there be a definite understanding as to the function of oral- and of silent-reading methods in relation to these aims, and that there be an abundance of concrete illustrations of recitation procedure in both oral and silent reading for each of the three stages of growth in reading ability.

Testing. Finally there is the problem of testing the abilities and attainments of the pupils in both oral and silent reading. A number of scientific standardized tests have been devised and used. Their use has resulted in valuable suggestions for improving the reading work. The teacher needs to have the advantage of the light that has been shed through these studies. She also needs to be able to devise tests of reading ability and attainment using the material at hand.

Content. While the content for the primary grades has been fairly well agreed upon and standardized, opinions differ widely as to the proper content for the middle and upper grades. Shall the content be a distinctly literary one

with little or no informational material, or shall there be rather large amounts of informational material and a minimum amount of classical literature? To what extent shall poetry be a part of the content? To what degree shall we use semi-literary material for extensive reading to provide vicarious experiences? To what extent shall we use the short unit, to what extent the medium-length unit, and to what extent the long unit such as the complete book? Shall textbooks in reading above the primary grades be discarded? All of these problems must be considered in the light of the definite aims which we accept and in relation to the methods and devices that are helpful in realizing these aims.

Motivation. The problem of securing interest that results in effort of a thoroughgoing sort is always a real one to the teacher. How shall we motivate the reading lessons so that they will be experiences of real and vital worth to the pupils, and at the same time develop the reading abilities, attitudes, interests, and appreciations which are to be the outcomes of the reading instruction? The child upon entering school is intensely interested in learning to read, and enjoys the oral-reading methods. But in the middle grades the children are no longer interested in doing the type of work that was done in the primary grades. The continuation of the primary oral-reading method into the middle grades has resulted oftentimes in a desultory type of reading recitation, with the larger emphasis upon pronunciation, definition of isolated words, and discussion of minor detail. The natural result has been inefficient reading and study habits on the part of a large percentage of the pupils, because of a lack of motive in the form of definite study problems that require vigorous thinking. Securing effective and worthy motives for the oral and for the silent reading is an important problem for the teacher and supervisor.

Vocabulary. There are many different problems that

arise in regard to reading vocabulary. How important is oral reading as a means of increasing one's vocabulary? Some pupils have great difficulty in pronouncing the words of their reading selections. What are the best means for developing facility in correct pronunciation? In some cases the pupil's facility in pronouncing words far outstrips his ability to grasp the meanings of words. What are the best means of developing a sense of word meanings essential to a good quality of comprehension?

Appreciation and application. How shall we bring the pupils to appreciate literature so that they will have a liking for the best in classical prose and poetry, and form the habit of extensive reading for recreation? How shall we lead the pupils to the application of their reading abilities to the problems of occupational, recreational, and community life? The problem of teaching children how to study has occupied the foreground of attention for a number of years. It is recognized that there is a close relation between the reading process and effective study. Is it the business of reading instruction to aid in training the pupil to apply his reading ability to the problem of learning how to study? If so, what are the detailed methods and devices by which this shall be accomplished?

The average teacher is in need of guidance, and is asking for help in connection with these and many other problems involved in teaching reading. It is the purpose of this book to render assistance in two ways: (1) by giving the principles underlying the solution of these problems, and (2) by giving an abundance of illustrations, including descriptions of recitations and lessons that will relate these illustrations closely to the principles.

SUGGESTIVE EXERCISES

1. Make a list of five major and five minor problems in the reading instruction for your grade.
2. Select the five questions in the chapter that interest you most.

CHAPTER II

PRACTICAL CONTRIBUTIONS TO THE READING PROBLEM FROM PSYCHOLOGICAL AND EDUCATIONAL RESEARCH

Some questions to consider before reading the chapter

1. Does the recognition of words or groups of words take place as the eye moves, or during the pause of the eye?
2. As a rule which gets the thought better, the rapid reader or the slow reader?
3. About how many words a minute do you read?
4. Will one comprehend better by reading aloud, or by reading silently?

Sources for conclusions. Previous to the decade just ended considerable progress had been made by educational psychologists, as Huey,[1] for example, in studies of the reading process. During the last decade a large number of scientific studies have been reported.[2] Most prominent among these are the studies made in the School of Education of the University of Chicago under the leadership of Dr. Charles H. Judd and Dr. C. W. Gray. In addition to the data obtained through the psychological laboratories, there has come into existence a large body of statistical data and accompanying interpretation, chiefly in connection with school surveys. It is the purpose of this chapter to give a brief summary of the practical contributions of these scientific studies to the problems of reading instruction.

1. Studies as to Eye-Movements

Importance of eye-movements. The study of eye-movements has occupied an important place in psychological

[1] Huey, Edmund B. *The Psychology and Pedagogy of Reading.* The Macmillan Company, 1908.

[2] See references, page 50, *Eighteenth Yearbook of the National Society for the Study of Education,* part II.

A. Oral — Average 10 pauses to the line.

One summer morning a little Tailor was sitting on his table by the window; he was in good spirits, and sewed with all his might. There came a woman down the street crying, "Good jams cheap! Good jams cheap!"

B. Silent — Average 6 pauses to the line.

There was once a man who had three sons, and nothing else in the world but the house in which he lived. Now each of the sons wished to have the house after his father's death; but the father loved them all alike, and did not know what to do; he did not

FIG. 1. EYE-PAUSES IN ORAL AND IN SILENT READING OF A SIXTH-GRADE PUPIL

studies of the reading process from the earliest investigations to the present time. In reading, the eye makes a series of quick movements with very brief intervening pauses. The actual reading takes place only during the eye-pause or act of fixation. The number of eye-pauses per line varies according to the maturity and efficiency of the reader. A good reader in the upper grades will make something like four pauses per line, while a poor reader may make as many as fifteen. The better readers not only make fewer pauses, but the eye-movements are of a more rhythmical character. The development of the proper eye-movement habits is one of the most important problems in reading instruction.

Fig. 1 (see page 7) illustrates the eye-movements of the same pupil in the two forms of reading, oral and silent.

The dots represent the eye-pauses in each case. This pupil is a fairly efficient sixth-grade reader. A larger number of pauses per line are made in the oral reading than in the silent reading. The duration of the pause in oral reading is generally longer than in silent reading. Consequently oral reading is a slower process.

Good and poor eye-movements contrasted. In technical articles by psychological experimenters, there are now available photographs showing the motor behavior of the eye in reading. In Plate I [1] are photographs of the eye-movements of different types of readers.

No. 1 is the photographic reproduction of the eye-movement of an adult silent reader of moderate speed. The Roman numerals indicate the line number and the Arabic numerals indicate the number of eye-pauses in each line. The vertical lines at A, B, C, and D show the sweep of the

[1] The photographic reproductions in Plate I are taken from vol. II, no. 1. Supplementary Educational Monographs; *An Experimental Study in the Psychology of Reading*, by William Anton Schmidt, published by the University of Chicago, 1919.

eye from the end of one line to the beginning of the next. The average number of pauses per line is seven.

No. 2 shows the eye-movement of a rapid adult reader who makes only three or four pauses per line in reading easy material. Note the rhythmical character of the movement of both of these.

No. 3 shows the eye-movement of a poor third-grade reader, nine years old. He makes a large number of pauses per line. Irregularities are characteristic of this reader. Consequently his eye-movement lacks rhythm. His oral reading is characterized by a lack of ease, smoothness, and fluency.

Numbers 5 and 6 show the eye-movements of a good second-grade silent reader and a good fifth-grade silent reader respectively. The record of the fifth-grade pupil shows considerable progress over that of the third-grade pupil in the number of pauses per line and in the rhythmical character of the movement. He made a considerably better record than the average of forty-five adults tested. His comprehension grade was ninety per cent.

The main problems in the development of the proper eye-movements in reading are to decrease the number of pauses per line and to develop a rhythmical movement.

Regressive movements and periods of confusion. In the case of failure of recognition, the eye tends to go back, thus making what is known as a "regressive movement." In the case of continued failure there may be a period of confusion. Poor readers have many pauses per line, with the rhythmical character of the eye-movements broken up by regressive movements and periods of confusion. These statements are illustrated by Figs. 2, 3, and 4, which are taken from *Reading: Its Nature and Development*, by Charles H. Judd. The vertical line in each chart represents an eye-pause. The number represents first, second, or third pause in the line.

In Figures 2, 3, and 4, the vertical lines represent eye-pauses or fixation points. The numbers at the top of the

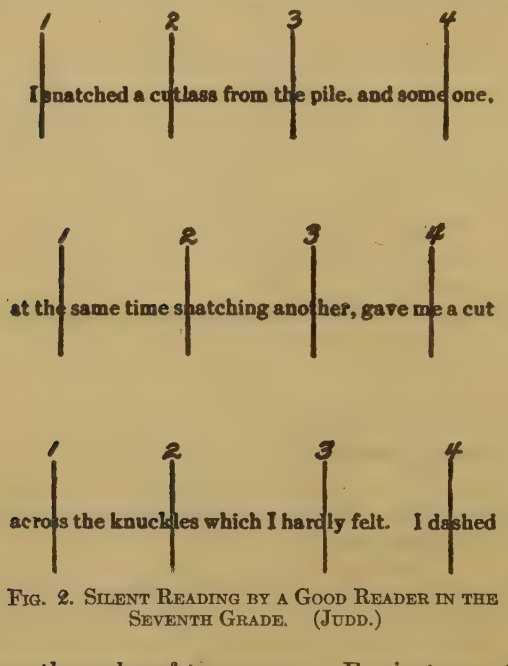

1 2 3 4
I snatched a cutlass from the pile. and some one,
1 2 3 4
at the same time snatching another, gave me a cut
1 2 3 4
across the knuckles which I hardly felt. I dashed

FIG. 2. SILENT READING BY A GOOD READER IN THE SEVENTH GRADE. (JUDD.)

lines show the order of the pauses. For instance, 1 means the first pause of the line and 2 the second pause. Note that the good reader in the seventh grade (Fig. 2) makes only 4 pauses to the line, and has an even distribution which contributes to the rhythmical character of the movement as a whole; while the poor reader (Fig. 3) makes 10 pauses to the line, and has an irregular distribution and regressive movements which destroy the rhythmical character of the total eye-movement. The good reader reads 29 words in 12 eye-pauses, while the poor reader reads only 19 words in 20 eye-pauses. The eye-movement of the good reader is smooth,

rhythmical, and rapid; the eye-movement of the poor reader is slow, uncertain, and irregular.

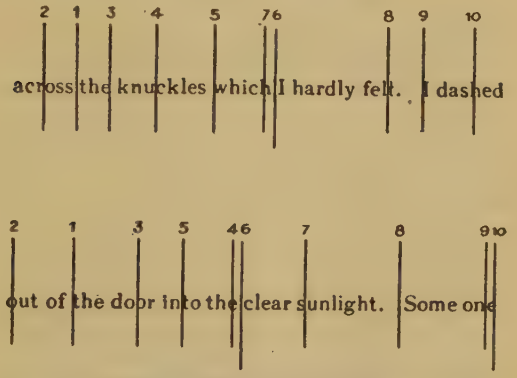

2 1 3 4 5 7 6 8 9 10
across the knuckles which I hardly felt. I dashed
2 1 3 5 4 6 7 8 9 10
out of the door into the clear sunlight. Some one

FIG. 3. SILENT READING BY A POOR READER IN THE SEVENTH GRADE. (JUDD.)

Fig. 4, toward the end of line 2, shows a case of extreme confusion. The child is evidently making the greatest effort to recognize the words, especially the word "reminded." The eye moves back and forth, making six pauses and involving one forward and two backward movements of the eye. It is clear, of course, that during a period of confusion like this the continuity of thought is seriously interrupted, and the mechanical side of word-recognition occupies the center of attention. An important problem for the teacher of every grade is how to prevent and overcome habits of slow, laborious reading of this type.

Longer units per eye-pause. The rate of the eye-movement may be increased either by lessening the duration of the pause, or by reducing the number of pauses. The smaller number of fixations the eye makes in reading a line, the longer will be the span of recognition or the scope of attention. That is, the fewer eye-pauses to a line the more words

recognized per eye-pause. It has been found, as a rule, that the rapid readers who have few eye-pauses to a line, or a larger number of words to the fixation, comprehend the meaning better than the rapid readers who make a larger number of eye-pauses, but of shorter duration. The impor-

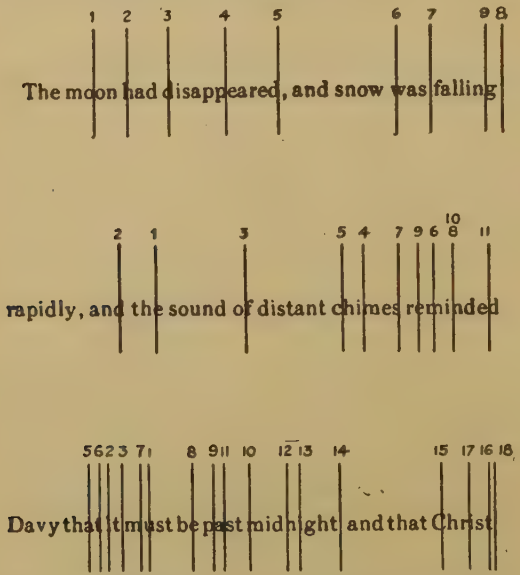

1 2 3 4 5 6 7 9 8
The moon had disappeared, and snow was falling
2 1 3 5 4 7 9 6 10 8 11
rapidly, and the sound of distant chimes reminded
5 6 2 3 7 1 8 9 11 10 12 13 14 15 17 16 18
Davy that it must be past midnight and that Christ

FIG. 4. SILENT READING BY A SLOW READER IN THE FOURTH GRADE WITH A POOR QUALITY RECORD. (JUDD.)

tant thing, then, is to develop the ability to recognize longer and longer units of reading matter within a single eye-pause. Specific means for doing this are suggested in later chapters.

Growth stages for three eye-movement habits. A recent study [1] shows the growth stages for three eye-movement

[1] Buswell, Guy Thomas. *Fundamental Reading Habits: A Study of Their Development.* Supplementary Educational Monograph No. 21, Department of Education, University of Chicago, June, 1922.

habits in their development from immaturity in the first grade to maturity in the high school. The three measurable elements studied are:

(a) the average number of fixations per line,

(b) the average duration of fixations, and

(c) the average number of regressive movements per line.

The growth curves for these three fundamental elements are reliable indexes of the development of the three following primary characteristics of eye-movements:

(a) the span of recognition,

(b) the rate of recognition regardless of the size of the recognition unit, and

(c) the regularity of the eye-movement or the rhythmic progress of the fixations along the printed lines.

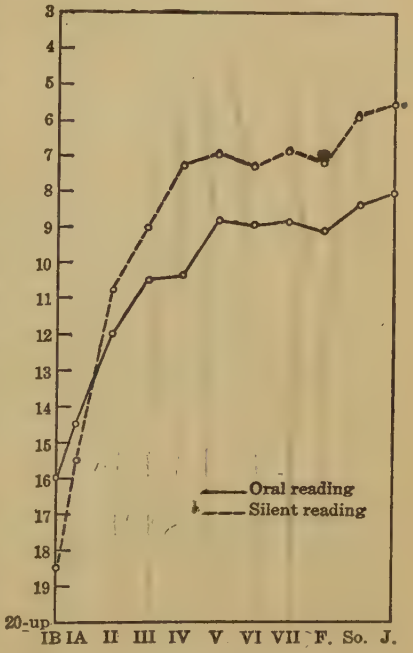


FIG. 4A. GROWTH STAGES FOR AVERAGE NUMBER OF FIXATIONS PER LINE. SCHOOL GRADE SHOWN ON HORIZONTAL AXIS; AVERAGE NUMBER OF FIXATIONS SHOWN ON VERTICAL AXIS.

Fig. 4A shows the growth curve for the average number of fixations per line for pupils from the first grade to the third year in the high school. In oral reading the lower first grade pupils make an average of 16 eye-pauses to the line, the upper first grade pupils 15, the second grade pupils 12,

and so on. The growth curves for the average duration of the pauses and for the average regressive movements per line are similar to those in Fig. 4A.

The result of this extensive study of eye-movement habits is "to emphasize the fact that the period of major development of the elements of span of recognition, speed of recogni-

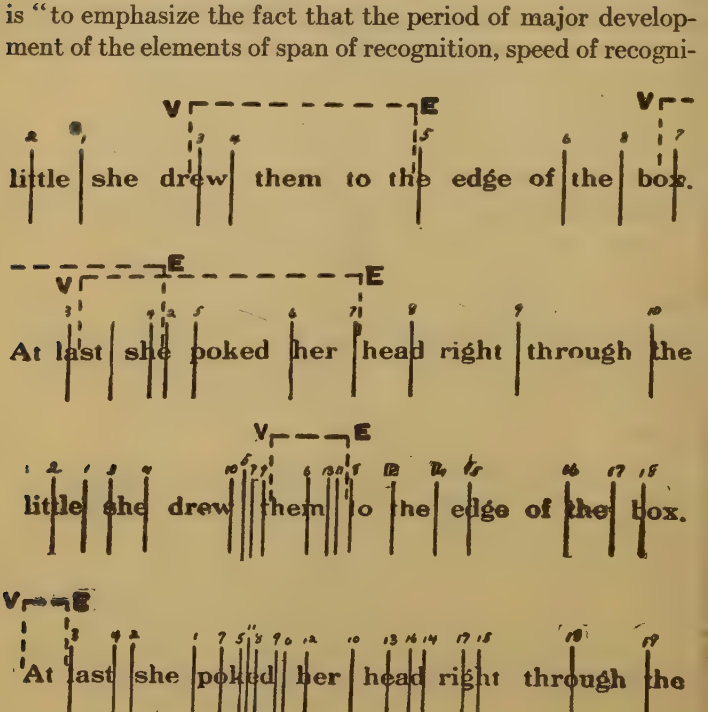

little she drew them to the edge of the box.
At last she poked her head right through the
little she drew them to the edge of the box.
At last she poked her head right through the

FIG. 5. EYE-VOICE SPAN OF A GOOD SECOND-GRADE READER. EYE-VOICE SPAN OF A POOR SECOND-GRADE READER [1]

[1] Buswell, Guy Thomas. *An Experimental Study of the Eye-Voice Span in Reading*, pp. 20-21. Supplementary Educational Monograph No. 17, Department of Education, University of Chicago, December, 1920.

tion, and regularity of eye-movements across the line comes during the first four years." It will be noted that in the

fifth, sixth, and seventh grades there is practically no growth in the maturity of the eye-movement habits either in oral or in silent reading. Thus we see that the fourth and fifth grades constitute a crucial stage in the development of more mature silent reading habits.

Questions naturally arise as to the type of school training in reading which had been given to the pupils examined in this study and as to the probable possibility, through a modification of the reading instruction in the fourth, fifth, and sixth grades, of eliminating the plateau in the curve for silent reading. The curves are based upon data secured from photographing the eye-movements of eight to nineteen pupils in each grade. These pupils were from the Elementary and High Schools of the University of Chicago, with the exception of some of the first grade and some of the high school pupils. With the exception of the first grade pupils, the eye-movement records are based upon the reading of the same material by all the individuals examined.

The eye-voice span. In oral reading the eye travels somewhat ahead of the voice. The distance between the point of the eye-fixation and the point of articulation at the same instant, is called the eye-voice span. This distance varies greatly in different individuals.

Fig. 5 shows the contrast between the eye-voice span of a good second-grade reader and the eye-voice span of a poor second-grade reader. The following are some important conclusions of Dr. Guy T. Buswell resulting from an extensive experimental study of the eye-voice span.

The results of the preceding analysis make it very clear that the development of a wide eye-voice span is a significant element in oral reading. As will be shown later, in silent reading a similar meaning-recognition span exists which appears to be closely related, in its development, to the eye-voice span. Since the width of eye-voice span is a factor of mature reading it should receive very definite attention in methods of teaching reading.

Summary. The following contrasts mature and immature eye-movements.

Immature eye-movements	*Mature eye-movements*
1. Many eye-pauses per line, short span of recognition.	1. Few eye-pauses per line, long span of recognition.
2. Eye-pauses of long duration, low rate of recognition.	2. Eye-pauses of short duration, high rate of recognition.
3. Many regressive movements, lack of rhythm.	3. Few or no regressive movements, good rhythm or regularity.

Mature eye-movements in silent reading show a higher degree of excellence in each of the three fundamental characteristics than do mature eye-movements in oral reading. But mature oral-reading eye-movements constitute a stage of development considerably in advance of immature silent-reading eye-movements. Consequently, until the child has reached a certain stage of maturity in reading habits, the development of fluency in oral reading is an aid in establishing good eye-movements. After the pupil has attained mature oral-reading habits, unless oral-reading methods give way to a considerable extent to silent-reading methods, the further maturing of silent-reading habits may be seriously hindered.

2. Rate and Comprehension

Rapidity and comprehension. An extreme view as to the correlation between speed and comprehension is that the greater the speed the better the comprehension. Another extreme view is that the slower the speed the better the comprehension. Fig. 6 shows that rapid speed and good comprehension are found together more than twice as often as rapid speed and poor quality. As Dr. Judd says, "These figures emphasize the fact that good readers are usually not slow and poor readers are usually not fast."

A simple experiment. The following simple experiment

is suggested for the classroom teacher as a means of observing the relation between speed in silent reading and quality

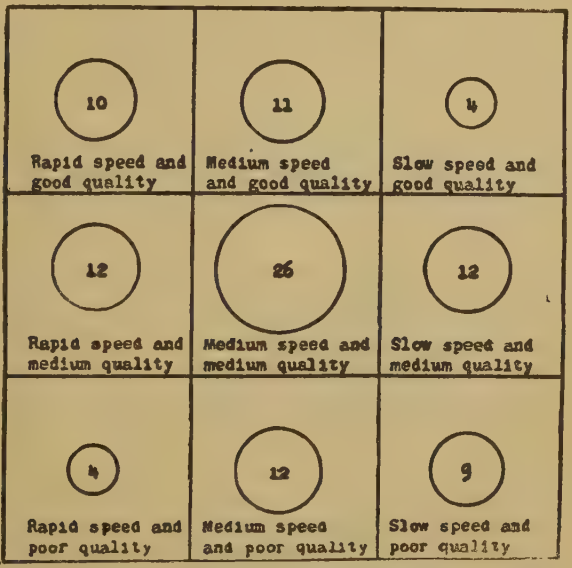


FIG. 6. PER CENT OF 1831 CLEVELAND PUPILS FOUND IN EACH OF NINE SPEED AND QUALITY GROUPS IN SILENT READING. (JUDD.)

of comprehension. Select a unit of ten to twenty pages in one of the reading books to be read by the class silently during the reading recitation. Prepare some questions upon the first few pages. Ask the pupils to read the selection to themselves, and without giving them any further suggestions or directions, observe the pupils carefully as they read. When the first pupil finishes reading the selection, ask all the pupils to stop reading, and report the number of pages read. Then ask the class the questions which you prepared upon the first few pages of the reading matter,

and observe how the pupils who read the largest number of pages compare in their ability to answer questions with those who read the smallest number of pages. The writer once asked an extension class of teachers to try this experiment, and they all reported that their rapid readers were better able to answer questions than the slow readers.

Conclusions as to rate and comprehension. The teacher should be cautioned, however, against concluding that her problem is merely one of getting her pupils to read faster. While higher rate and good comprehension are commonly related, there are many individual exceptions. The large individual differences, in rate of reading noted in all the investigations, in each grade, probably means that there is a speed for each individual above which he cannot read without decreasing his comprehension, unless at the same time his power of comprehension is increased. If the pupil is a rapid reader, but retains little of what he reads, the comprehension phase needs emphasis. If, on the other hand, he is a slow reader and comprehends well, he should be encouraged to read faster. The ideal situation is to have the rate and comprehension advance together. While the emphasis is being placed upon one, the other should not be neglected. The timeliness of these suggestions is well substantiated by data in the *Report of the St. Louis School Survey*. A certain school which had been emphasizing rate of reading stood relatively high in rate, but low in comprehension, while another school which had given no particular thought to rate, but had followed the usual intensive oral type of reading throughout the grades, stood low in rate and medium in comprehension.

O'Brien's conclusions as to the effect of increased speed upon comprehension. A very valuable study of the development of speed has been recently reported by Dr. John A. O'Brien. With reference to the possibilities of training in

speed, and its effect upon comprehension, he lists the following conclusions:[1]

The present average rates in silent reading in Grades III to VIII are needlessly slow and inefficient.

These rates can be greatly increased by systematic training over a period of two months.

The improvement effected in the first month is considerably greater than in the second month of training.

Marked increase in speed of reading may be effected without any impairment of comprehension.

The setting up of habits of rapid reading does not *per se* increase the accuracy of comprehension.

To secure marked improvement in accuracy of comprehension, special stress must be placed upon training designed specifically to secure that effect.

Marked improvement in comprehension, as measured by the number of questions correctly answered, resulted from training in rapid silent reading.

The marked gain in the number of questions correctly answered demonstrates the persistence of the improvement in reading rate in a changed situation involving a different mental attitude; i. e., in careful reading, and in reading to answer written questions.

3. Other Factors affecting Silent Reading

The rate of silent reading. A number of different factors have been found to affect the rate of reading of a particular individual. One's rate will vary according to the character of the material. For instance, easy narrative material is likely to be read more rapidly than exposition or than poetry. The familiarity of the material will also affect the rate. A physician will read medical books and journals much more rapidly than a treatise on law. In the mechanical make-up of the reading material the length of the line, the size of the print, and the leading or distance between the

[1] O'Brien, John A. "The Development of Speed in Silent Reading"; in the *Twentieth Yearbook of the National Society for the Study of Education*, part II. Public School Publishing Co., Bloomington, Ill., 1921.

lines, are the more important factors affecting rate. A long line retards the rate. A line a little longer than that of the ordinary newspaper column has been found to be the most advantageous for speed in reading. Medium-sized print is read somewhat faster than large print. If the lines of print are too close together the rate is retarded.

Factors in the development of speed. Dr. John A. O'Brien, in the study previously referred to, gives the following factors in the development of speed:

1. Practice in rapid silent reading.
2. The decrease of vocalization in silent reading.
3. Training in perception by means of short exposure exercises, combined with practice in rapid reading.
4. Familiarity with subject-matter.
5. Habits of regular, uniform, rhythmical eye-movements.
6. Purpose for which the subject-matter is read.
7. Concentration of attention.
8. Ability to grasp the meaning of contents.
9. Recognition of the value of the habit of rapid silent reading combined with the determination to acquire this habit.
10. The pressure of a time control.
11. Individual graph and class chart.

Standards in rate of reading. A number of investigators nave reported standards in the rate of silent reading for the different grades in terms of the number of words read in a minute. These rates are based upon reading material that for the most part is narrative in type and adapted in content and vocabulary to the grades in which the tests are given. They represent the median[1] rate of a very large number of pupils of each grade.

Table I should be read as follows: Gray's standard for

[1] The median is about the same as the average, and means the middle point in a series. For an explanation of the term "median" and how to calculate it, see *Measuring the Results of Teaching*, by Walter S. Monroe, pp. 29 and 102. Houghton Mifflin Company, 1918.

silent reading for the second grade is 90 words per minute, 138 for the third, 180 for the fourth, etc.

TABLE I. TABLE OF STANDARDS IN RATE OF SILENT READING—WORDS PER MINUTE [1]

GRADE	2	3	4	5	6	7	8
Starch.....	108	126	144	168	192	216	240
Gray.....	90	138	180	204	216	228	240
Courtis.....	84	113	145	168	191		

The standards given in Table I are shown in graphic form in Fig. 7. Note that the three sets of standards worked out by these three different investigators are in fairly close agreement. The Starch Standards and the Courtis Standards show a regularity of increase in rate from grade to grade. For instance, in the Starch Standards, the increase in rate from the fourth to the fifth grade is the same as from the seventh to the eighth. But in the Gray Standards, the increase in rate from grade to grade is considerably greater up to the fifth grade than it is above the fifth grade. In other words, Gray's studies tend to show that the intermediate grades are more significant in the development of an efficient reading rate than are the upper grades.

A comparison of the O'Brien, Gray, Courtis, and Starch rate norms. It has already been noted that the rate according to the Courtis and Starch norms increases gradually from grade to grade, while the rate according to the Gray norm increases much more rapidly below the fifth grade than above the fifth grade. The O'Brien norm shows an

[1] Copied from the Class Record Sheet for the Courtis Silent-Reading Test.

increase in rate above the fourth grade more nearly like those of Courtis and Starch than like that of Gray. The main difference between the O'Brien rate of increase from grade to grade and those of the other norms, as shown in Figs. 7 and 8, is that the O'Brien norm shows a much more rapid increase from the seventh to the eighth grade than the other norms show. Gray's conclusion[1] that the rate of silent reading tends to become fixed above the fifth grade does not seem to be justified in the light of the findings of these other investigators. O'Brien's careful experiments seem to bear out the conclusion that there is quite as great, if not even greater possibility of increase in rate in the seventh and eighth grades than in the intermediate grades.

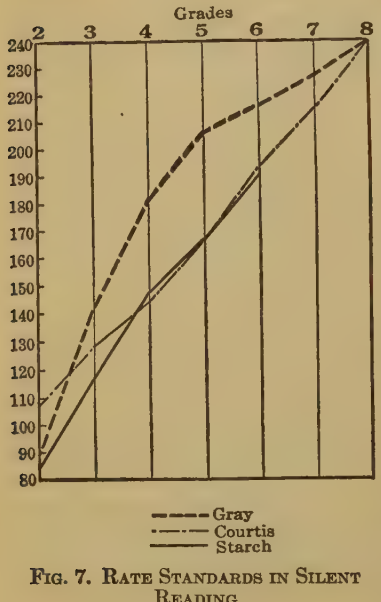


FIG. 7. RATE STANDARDS IN SILENT READING

At least, this conclusion appears to be true regarding easy narrative material. Account should be taken, however, of the fact that O'Brien's conclusions are based upon the comparative results of giving the Courtis Silent Reading Test, Form I, before training, and Form III after training.

[1] Gray, William S. "Growth Periods in the Development of Reading Ability in Reading"; in the *Eighteenth Yearbook of the National Society for the Study of Education*, part II. Public School Publishing Company, Bloomington, Ill., 1919.

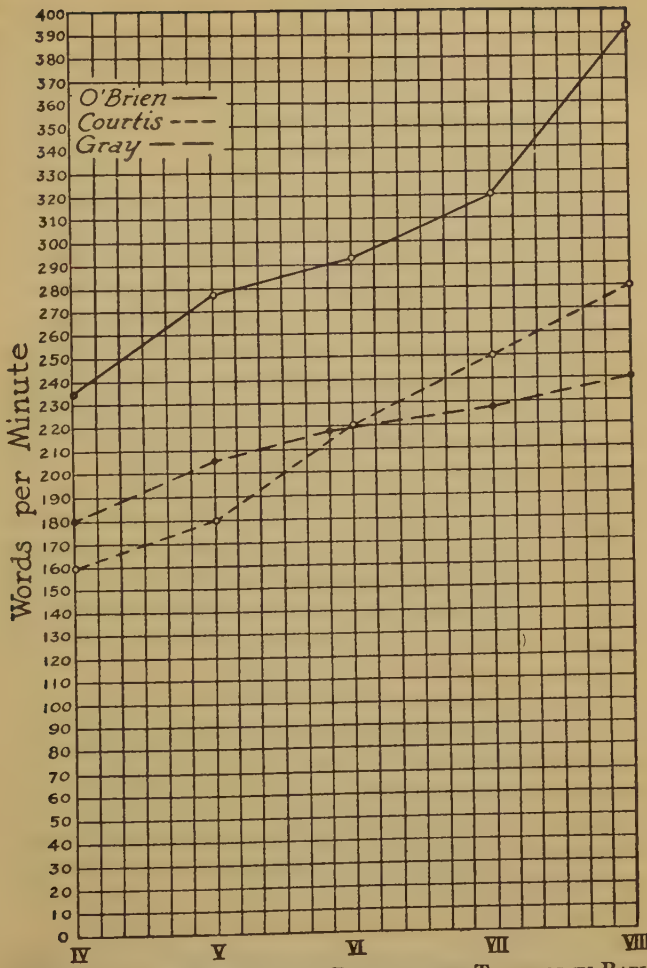


FIG. 8. THE AVERAGE RATE FOR PUPILS AFTER TRAINING IN RAPID READING, AS COMPARED WITH NORMS REPORTED BY COURTIS AND GRAY FOR ORDINARY READERS

Each test consists of a simple story of about third- or fourth-grade level. A sample may be seen on page 237. The Gray Silent-Reading Tests for the middle and upper grades consist of material more difficult than the material of the Courtis Tests, especially so in the seventh and eighth grades. Whether results similar to O'Brien's in the development of speed in reading material on a seventh- and eighth-grade level will result from training needs to be determined by additional experiments.

Oral and silent reading. Oral reading is a slower process than silent reading, as is illustrated in Fig. 1. The rate of oral reading is necessarily limited by the muscular activities involved in articulating and pronouncing, while silent reading has no such limitations. In the primary grades the rate at which the pupil can interpret the meaning of the symbols is not greater, and sometimes even less, than the rate of vocalization in oral reading. But some place in the development of the child's reading ability, probably about the end of the third grade with the average pupil, the rate at which the pupil can comprehend in silent reading exceeds his articulation rate in oral reading. These facts are illustrated by Fig. 9.

Note that the rate of recognition of printed words becomes higher than the rate of articulation at the beginning of the fourth grade. In the seventh grade the average pupil recognizes words nearly twice as rapidly as he can pronounce them. Above the third grade, if oral reading is over-emphasized at the expense of opportunity for considerable amounts of extensive silent reading, the normal development of the silent-reading rate may be retarded. The great majority of scientific students of the reading problem regard the oral-reading method as the appropriate and indispensable method in the primary reading lessons. They also regard its common predominance above the primary

grades to be without justification. Silent reading is the form most largely used in life, and the responsibility of the school to give the pupils specific training for the development of greater ability in this form of reading is coming more and more to be realized.

It has been found that in the main the pupils who do well in oral reading do well in silent reading. This probably means that the development of smooth, fluent oral reading in the primary grades is an important aid in the development of the proper eye-movement habits in silent reading. It is important for teachers to realize the relation of oral reading to silent reading in the primary stage of learning to read. It is also important for teachers to realize the limitations and dangers of oral reading beyond the primary grades. A teacher once advised a pupil who had some difficulty in getting her history lesson to read aloud during her home study. The advice was given, of course, in accordance with a common idea that one comprehends better reading aloud than reading silently. However, in so far as scientific studies have been made, the

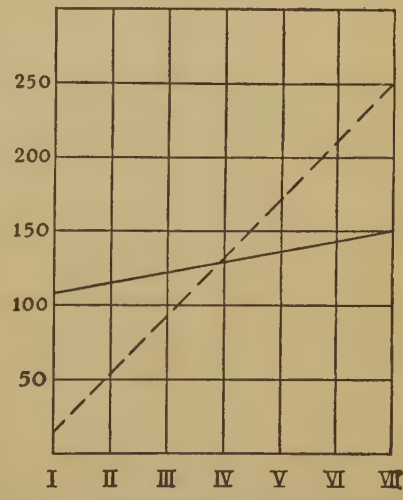


FIG. 9. IMPROVEMENT IN RATE OF ARTICULATION AND IN RATE OF RECOGNITION OF PRINTED WORDS IN SUCCESSIVE GRADES

The full-drawn line represents the rate of articulation. The broken line represents the rate of recognition of words. (Judd.) [1]

[1] From *Reading; Its Nature and Development*, by Charles H. Judd, p. 145.

evidence tends to show that one comprehends better reading silently than reading aloud.[1]

Vocalization and inner speech. The natural tendency of the beginner in reading and of the unpracticed reader is toward vocalization. This takes the form of reading to one's self in a whisper, or in a suppressed tone. It is not uncommon to observe young children reading with lip movement and slight vocalization when they are studying or reading to themselves. Freeman [2] says:

> Even though a practiced reader does not give these outward signs of pronunciation, yet it has been shown by experiment that the vocal cords and the tongue make very slight movements which correspond to the words which are being read. Not only are the words reproduced in some form of inner pronunciation, accompanied by the imagination of the sound of the words or of the feeling which is produced in pronouncing them, but we also have imagery which corresponds to the relationships of the words of the sentence. Although one may, when he has acquired the habit of rapid silent reading, slur over the articulation of the individual words, yet this modulation of the voice remains, and is represented in the imagination or in actual changes in the vocal cords or in other organs of speech which correspond to such modulation. These tendencies to inner speech are somewhat different from those which complete themselves when one is speaking, as is shown by the fact that they may take place during inspiration of breath as well as during expiration; but, though they are thus modified in silent reading, they have an important connection with the apprehension of meaning.

Articulation and comprehension. From the studies thus far made, it is not clear to what extent, in training for rapid

[1] Mead, C. D. "Silent Reading *versus* Oral Reading with one hundred Sixth-Grade Pupils"; in *Journal of Educational Psychology*, June, 1915, vol. VI, pp. 345–58.

Pintner, R. "Oral and Silent Reading of Fourth-Grade Children"; in *Journal of Educational Psychology*, June, 1913, vol. IV, pp. 333–37.

[2] Freeman, Frank N. *Psychology of the Common Branches*, p. 84. Houghton Mifflin Company, 1916.

silent reading, we may decrease this inner articulation without also decreasing the quality of the comprehension of the meaning. It would appear that this would depend upon the purpose of the reader. In reading poetry, wherein the appreciation depends upon realizing auditory values in the rhythm, the melody, the alliteration, or other sound characteristics, it is necessary to read in such a way that one has time to get a clear experience of these characteristics. The same thing is true, but in a smaller degree, in reading literary prose, especially such as the oration or poetic prose. But in reading purely informational material, or in reading to get a specific fact, it would appear that decrease in the amount of inner articulation through increase in the speed of reading would not affect the comprehension. Even in this type of reading, though, it remains for further investigation to determine the extent to which it is advisable to decrease the inner speech.

Articulation and rate. Too great an emphasis upon phonics and oral reading, without due attention to training in the rapid recognition of words and phrases, may seriously retard the development of an efficient rate of silent reading. Habits of lip movement and pronounced inner speech in silent reading are retarding factors in the development of an efficient rate of reading. Efficient silent reading involves a speed greater than permits of anything like clear evidence of vocalization.

Visual perception in reading. How does visual perception take place in reading? Do we recognize words by seeing them letter by letter? Do we recognize groups of words or sentences by seeing word by word? What are the factors that make recognition easier and more rapid? What practices in school retard or aid facility in recognition, which is the foundation for the proper rate in reading? For a full discussion of these problems the reader is referred to

Chapters IV and V in Edmund B. Huey's *Psychology and Pedagogy of Reading*, and Chapter III in *Reading in the Primary Grades*, by Frances Jenkins. Only a brief summary can be given in this treatment.

Huey says, "There seem to be very great individual differences, and these depend partly, though never wholly, on the methods by which the reader has learned to read." The alphabet method of teaching reading presumed that visual perception takes place letter by letter. The slow, laborious readers often produced by that method would indicate that the alphabet method of beginning reading tended to hold the pupil to a very inefficient type of recognition. Huey summarizes by saying, "We are brought back to the conclusion of Goldschneider and Mueller that we read by phrases, words, or letters as we may serve our purpose best." The psychology of reading indicates that it is best to assume that the child in beginning reading is able to perceive visually in word-wholes, and "that the reader's requirement of ease and power in reading comes through increasing ability to read in larger units." Studies of eye-pauses show that it is rare for a pupil in the first two grades to be able to recognize more than a single word at a single eye-pause.

The necessity for the child to acquire a means by which he may work out the recognition of new words makes it necessary for the school, at the appropriate times beyond the beginning stage of learning to read, to bring to his consciousness such details making up the word as letters, phonetic elements, syllables, prefixes, suffixes, a word-part within a word, etc. Any one of these may be a unit of recognition under a particular circumstance. Studies of eye-movements show that it is not infrequent for adults, as well as children, to make more than one eye-pause in the recognition of a single word. But the most rapid, efficient

readers are able to recognize considerably more than a single word in a single eye-fixation. The problem of the teacher is to know what practices will develop an ability to recognize increasingly longer units.

The recognition of a word through visual perception, as a rule, does not take place through a detailed seeing of the letters or other parts of the word. After we become familiar with a word, its recognition is " set off " by " cues." These cues are dominant parts of the word. The consonants are more important than the vowels, especially the parts that extend prominently above or below the line. The upper half of the word is more important in setting off recognition than the lower half. " The first half of the word is of considerably greater importance for perception than is the latter half."

It was found that during a reading-pause there is first an impression of the whole word, as lively, stiff, etc.; for example, a feeling-reaction to the total word-appearance. This may alone suffice to set off the recognition of the word; usually, however, with objective readers at any rate, there follows a successive coming to consciousness of first the high dominant letters, then the low and indifferent ones. Small letters, adjoining a dominant letter may, by their proximity, help in forming a total configuration, and may thus come to consciousness as a part of a dominant complex. With some readers, however, and perhaps with all of us for many words, the total word-form, word-length, etc., seem to characterize the word and are apparently the first factors in its recognition. In these cases the stimulations from all parts and points which signalize this total form, and this general outline, rather than a few particular dominant letter-shapes, is the aspect of which we are apt to be most conscious in the total recognition. In such cases the recognition could be set off by a skeleton drawing of the word showing no particular letter-forms, and might well occur at distances at which particular letters were no longer recognizable as such.

Subjective and objective readers. The experiments indicated that readers may be either of a subjective or objective type. The

subjective type is characterized by a wandering attention which travels far from the fixation-point, by a large associative contribution in perceiving, and by slight fidelity to the outward object. Readers of this type apperceive words from the total character of the word-form rather than from the dominating parts, these latter not differentiating from the whole. The objective readers, with characteristics which are the opposite from the above, recognize the dominating parts first, and the effect of the total form is minor. They read a smaller amount at a glance than do the subjective readers, but are less liable to error.

The visual recognition of a familiar phrase, as a phrase, is but a repetition of the process described above, the recognition of constituent words as well as of letters in this case being partially inhibited in favor of the total recognition of a larger unit. Larger and larger unitary reactions are set off as familiarity makes this possible, the same excitations coming to serve as cues for the larger recognitions instead of for the smaller, while the earlier processes or recognition habits, even when they do atrophy, are performed automatically, consciousness ever tending to leave them for higher levels.[1]

There has been little published giving the results of experimental teaching to determine the effectiveness of devices or practices in applying the psychological conclusions given in this section. C. T. Gray, after extensive experiments in training for improvement in reading, reports as follows: "In the light of these facts it may be repeated here that without doubt the type of training which is given in primary work by means of flash-cards is a very important element in the early training in reading." [2]

There are given valuable suggestions in Chapter III of *Reading in the Primary Grades*, by Frances Jenkins,[3] apply-

[1] The preceding quotations in this section are from *Psychology and Pedagogy of Reading*, chap. III, by Edmund B. Huey. The Macmillan Company.

[2] Gray, C. T. *Types of Reading Ability as exhibited through Tests and Laboratory Experiments*, p. 159. University of Chicago Press, 1917.

[3] Jenkins, Frances. *Reading in the Primary Grades.* Houghton Mifflin Company, 1915.

ing to practice the findings of experimental psychology. She gives very suggestive details on types of word and phrase drills, and types of speed drills.

SOME FACTS YOU SHOULD KNOW

1. At what rate in silent reading should the pupils in your grade read?
2. Are you a slow, a medium, or a fast reader?
3. What is meant by eye-pause? By span of recognition? By inner speech? By regressive movements?
4. For the average pupil, about when does the rate of recognition begin to exceed his rate of articulation?
5. What quality in oral reading is an evidence of good eye-movement?
6. Repeating in oral reading is an evidence of what type of eye-movement?
7. What effect will a decrease in the number of eye-pauses per line have upon the rate of reading?
8. Does the slow, the medium, or the fast reader, as a rule, excel in comprehension?
9. What length of line is most favorable to speed in reading?
10. Which is the more important final outcome of reading instruction, oral reading or silent reading?
11. Name three retarding habits in silent reading which pupils tend to acquire.
12. As a rule, are words recognized letter by letter or by the total impression of the word?

PROBLEMS FOR STUDY AND DISCUSSION

1. For your grade, which is the more important, the oral reading or the silent reading?
2. Is rate in oral reading of consequence? Why?
3. What advice would you give to a pupil who tends to read orally word by word?
4. What methods and devices could be used for increasing rate in silent reading?
5. What effect would proper phrasing in oral reading have upon the rate of oral reading? Upon the eye-movement?
6. About how many times as fast does your fastest reader read silently as compared to your slowest reader?
7. Why discourage pointing with the finger, lip movement, and vocalization?
8. Which do you think the more accurate set of rate standards, the Courtis, the Gray, or the O'Brien standards?

9. Examine a copy of the Courtis Silent-Reading Tests. What factors in the mechanical make-up of the page would tend to retard the rate?
10. From a psychological standpoint, which is the better method for beginning reading — the alphabet, the word, or the sentence method?
11. Why is there more danger of over-emphasizing oral reading in the intermediate grades than in the lower grades?
12. Compare the reading content of the Courtis Reading Tests and the Gray Silent-Reading Test and report essential differences that might partially account for the O'Brien rate norms being so much higher than the Gray norms.
13. Discuss devices for increasing the eye-voice span.
14. Contrast immature and mature eye-movements in oral reading with respect to four fundamental elements.
15. Compare mature eye-movements in oral reading with immature eye-movements in silent reading.
16. Compare mature eye-movements in oral reading with mature eye-movements in silent reading.

CHAPTER III

TEACHING READING IN THE PRIMARY GRADES

1. General Statement as to Aims and Methods

Exercises to do before reading the chapter

1. Write one reason why the oral-reading procedure has been so universally used by teachers in all grades with all types of reading matter.
2. List what you consider to be the main values of oral reading. Which of these values are common to all the grades and which are peculiar to a certain grade or group of grades?
3. List the two primary methods you think the best.
4. Do you favor having reading textbooks in all the grades?
5. Write the name of the series of Readers that you think to be the best one.

Relative value of oral and silent reading. Outside of the schoolroom most individuals use oral reading very little. On the other hand, most persons use silent reading daily. Therefore, the ultimate training outcome of reading instruction is the development of efficient silent readers rather than oral readers. Facility in silent reading is of first importance, while training in oral reading as an end in itself is of only secondary importance.

There are occasional situations in life when most individuals need to be able to convey thought or feeling to an audience of one or more persons through oral reading. Training in ability to convey meaning to others through oral reading is therefore an important aim of the reading instruction. In this respect oral reading has a value as an end in itself.

Importance of oral reading in the lower grades. The other values of oral reading may be considered as values of

means. The psychological reason why oral reading is more valuable in the lower grades than in the later stages is well stated by Professor Suzzallo:[1]

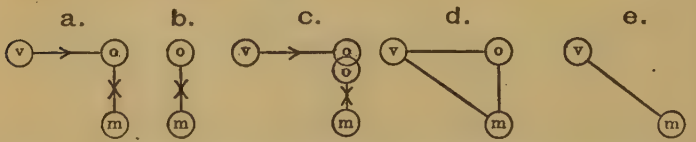


FIG. 10. DIAGRAMS ILLUSTRATING CONNECTION BETWEEN ORAL SYMBOLS VISUAL SYMBOLS, AND MEANING

These show how oral reading of the vocabulary previously experienced through oral speech or through hearing aids in attaching meaning to the unknown visual symbols.

Reading is an attempt to establish connections between three factors, the oral symbol, the visual symbol, and the meaning. The young child beginning to learn to read orally attaches meaning to the visual symbol through the oral symbol in the direction indicated in diagram (*a*).

Oral reading is absolutely essential and basic in the first two grades (roughly), or as long as mechanics are a major difficulty, or as long as the child's reading vocabulary is still smaller than his speaking or understanding vocabularies. Its function is to connect the meaning and the printed symbol through the intermediary of sound or pronunciation. Before the child can read, he already has a connection between the oral symbol and the meaning for any word he understands orally, as illustrated in (*b*). Phonetic work aids him to tie the visual symbol to the oral symbol. The overlapping of the speech symbol and the oral symbol (derived through phonetics from the printed symbol) results in suggesting meaning for the printed symbol. This process is illustrated by (*c*) in which *v* represents the visual (printed or written) symbol. The upper *o* represents the sound element in phonetic analysis or pronunciation. The *m* represents the meaning, and the *o* connected with it represents the oral symbol which the child has already connected with the meaning gained through experience in hearing the word. As one oral symbol identifies itself with the other through overlapping, the connection between the visual symbol and the meaning is made.

[1] Quoted from a letter of March, 1915, in answer to a questionnaire, and with the permission of Professor Suzzallo.

As long as this method is followed, all primer reading must speak of things within the child's experience through words within the child's vocabulary. Otherwise, meaning must be developed as well as pronunciation and form recognition.

The phonetic method grows less and less useful (1) as one cannot count on common experiences and common oral vocabularies among children, and (2) the more one's basal text presents new experiences and new words — often desirable for interest. Thus the tendency to drop the emphasis on the phonetic methods and develop all three factors in the class period with all three connections, instead of two factors and two connections as hitherto, as in (*d*).

Speedy silent reading makes a short cut by making the connection directly between the visual symbol and the meaning as indicated in (*e*).

In the primary stage of reading development, oral reading has an important value in addition to its value as an intermediary in attaching meaning to printed or written symbols. It has been pointed out that the development of good eye-movement habits is fundamental to efficiency in reading. Until the pupil's rate of articulation overtakes his rate of recognition of printed words, the pupil's oral reading is a good index to his eye-movement habits. If he has a habit of repeating, or if he is a slow oral reader, a word-by-word reader, he has not yet developed good eye-movements. The development of fluency in oral reading means the development of the ability to recognize in larger units per eye-pause and the absence of serious regressive movements or periods of confusion. It has been the writer's experience that there are pupils in most every intermediate-grade class and even some in the higher grades who are still in the primary stage of reading development. For the great majority of these, oral reading will be of value. There will probably be exceptions, especially those having speech defects such as stammering and stuttering.

Oral reading and poetry. Oral reading has an important

function in connection with the teaching of poetry and other distinctly literary types of reading matter. Poetry should be taught by the oral-reading method because the values are distinctly auditory, and can be fully appreciated only through the ear. But the oral reading here again is mainly a means to a more important end.

Social value of oral reading. Some place great weight on the social value of oral reading. In the St. Louis *Course of Study in Reading* we find the following statements in support of the social value of oral reading under the plan of a reader and a reading audience with the same material:

> There are elements of inspiration in community of attention; there is a peculiar intensity in community of interest; new facts are added to the individual's insight by his being a part of a new mind-of-the-group. To both the reader and the reading audience a fuller conception of meaning results from the coöperation of the eye and the ear.
>
> An incalculable value, from the standpoint of social adjustment and constructive social progress, accrues to the group from any series of common experiences, especially those that enlarge the area of mutual understanding and sympathy, and that tend to establish a general acceptance of common standards of quality in thought and motive. . . . The opportunity for intimate participation that is afforded to a class in reading meetings may therefore be made to serve a significant social purpose, for the group and for every individual in it, in strengthening their sense of harmony and interrelation of thought and feeling, — an essential factor of democracy.

The question arises as to whether these social values, derived through community of attention, community of interest, the new mind-of-the-group, intimate participation, etc., are dependent upon oral reading. There are no doubt situations in the reading instruction under which oral reading may be a valuable means of realizing these social values. However, we know that there is a great deal of reading instruction under the oral-reading method wherein these

social values are not noticeable. The writer has also seen silent-reading lessons in which these social values were very obviously being realized. The social value of oral reading depends upon the use made of oral reading, just as the social value of any school activity depends upon the way in which that activity is managed. Group audience reading has large possibilities for socialized study and recitation periods.

Minor values of oral reading. Other values of oral reading are its importance in the development of oral expression, correct enunciation and pronunciation, in testing comprehension, in vocabulary development, and in developing facility in, and improvement of the use of the voice. These values are more important in the primary grades than elsewhere. Oral reading is an important factor in developing a silent-reading vocabulary as long as the pupil's spoken or hearing vocabulary is greater than his reading vocabulary. But for words which the individual meets for the first time in reading, the experience of hearing these words in class discussion or in separate vocabulary exercises, is a more important one. The relation of oral reading to vocabulary growth is further elaborated in Chapter VIII, in the section dealing with vocabulary training.

General statement of aims and outcomes. The general aims of reading instruction in the elementary school may be summarized as follows:

1. To develop an ability to read the common types of reading matter silently, at a fair rate and with a reasonable quality of comprehension. Reading is primarily a thought process, and from the very beginning it should be done for the purpose of getting meanings. The development of efficiency in reading involves the development of the ability to grasp meanings in increasingly larger units, the development of the ability to read with a feeling of meaning and an appreciation of values, and the development of discriminative reading.

2. To develop an ability to convey meaning or feeling to another person through oral reading. This is done partly through the usual plan of oral reading in which all the pupils of the class have before them the material being read aloud consecutively, pupil by pupil. But this aim cannot be adequately realized without a considerable amount of audience reading.
3. To develop a taste for, and an interest in the best types of reading material, and to develop a real appreciation of literature suitable to the age of the pupil. The highest ideals and aspirations of the race are given best expression in the form of our classical literature. Pupils should gradually be led to an interest in the best in classical literature, as well as in the best of other types of literature.
4. To provide an extensive vicarious reading experience for all pupils, with provision for individual differences in ability and tastes. This reading experience should be in the nature of excursions into various fields of interest, such as nature, history, biography, current events, vocations, sports, etc.
5. To bring the pupils into contact, through reading, with the great ethical ideals of behavior, such as perseverance, patriotism, honesty, love, beauty, etc. This is not meant to involve the use of much didactic material. The growth of ideals comes through experience. Reading is an avenue through which the individual may experience the highest aspirations and the deepest struggles of the soul, in the past and in the present.

2. Problems of the Beginning Stage

By the age of six most children have reached the stage where they desire to learn to read for themselves, but this natural desire to learn to read may be crushed through dis-

appointment if the method of learning to read becomes drudgery to the child. The old method of beginning with the letters of the alphabet and meaningless combinations of symbols was a laborious, slow process, resulting, in many instances, in stultifying the pupils' natural enthusiasm to learn to read and in forming very poor reading habits. One of the main problems of the beginning stage is how to keep the necessary attention to the mechanics of reading from seriously interfering with thought-getting or interest in the content.

Early primer methods. A great variety of beginning methods have been used in primers. There are two leading points to consider in selecting a method for the beginning reading lessons. Shall we begin with the word method or with the sentence method? What shall be the content of the beginning lessons? Some primers begin with nursery rhymes, others with a story or cumulative tale, while the beginning lessons of other primers are about the objects, activities, and experiences in the child's immediate surroundings.

Ten to fifteen years ago the beginning lessons in most primers related to the child's immediate surroundings. The lessons were about the dog, the cat, mamma, the baby, or actions such as to run, jump, fly, and sing. Some of the primers began with the single word, some with a phrase expression, such as " Good-morning," and some began with sentences of four or five words in length. The chief fault of most of these primers was a mechanical repetition of words in succeeding sentences, such as the following:

The kitty sees me.
Can you see the kitty?
The kitty can see the dog.
I like the kitty.

In many instances the reading lessons were of uninter-

esting content, because of a lack of natural sequence of thought from sentence to sentence and lesson to lesson. There was unnatural repetition of words in a thought-setting that was scrappy.

The next step in the development of primers was to begin with some simple experience or activity in the child's immediate surroundings, and, from a very simple beginning, to develop a theme of interest running through a series of lessons. *The Riverside Primer* begins with some very easy reading of phrases in connection with a picture story of finding a bird's nest. A series of lessons follows, developing the story and activities of these birds. A much more natural repetition of words and expressions is thus secured. Other primers follow similar plans.

The simple-story primer. During the past ten years a number of primers have been produced upon the theory that the primer should contain only good literature, and that interest will be more easily sustained through the use of the simple folk-tale for the beginning lessons. *The Reading-Literature Primer* is a very good one of this type. It begins with "The Little Red Hen." The title of the story, with an illustration of the hen, occupies the first page. The story proper consists of eight pages, with an attractive illustration toward the top of each. The final page is a review lesson on the story. The preface to the *Primer* says:

> Experience proves that all children are interested in and enjoy the simple folk-tales. . . . Avoiding the long struggle through forced interest, and devious byways of artificial methods, we start the child at once into the realm of good, appropriate literature.

The test of this theory is whether the difficulty of the reading is so great, and the progress in getting the story so slow, that the children struggle in a laborious effort to recognize the words and sentences and lose interest in the story. It is interesting to note that in the *Teacher's Manual*

for this *Primer* a very slow procedure is outlined in detail. By the end of the tenth lesson the pupils progress only to the end of page five of the story. The teacher is left to determine how many lessons to use to finish it. Imagine the intense interest (?) the children would have in this story, after laboring through it, sentence by sentence, for a period of two or three weeks.

Other slow-approach primers. Other beginning books constructed upon the same theory provide an equally slow method in the *Teacher's Manuals*. The plan of work given for the beginning lessons in *Progressive Road to Reading* (Silver, Burdett & Company) is as follows:

ORDER OF DEVELOPMENT

I. Oral Work: Development of Content.
- (*a*) Telling of the story by the teacher.
- (*b*) Conversation on the subject-matter of the story.
- (*c*) Oral reproduction of the story by the pupil.

II. Blackboard Work: Establishing of Relations.
- (*a*) Presentation and formal reading of the first sentence as a whole.
- (*b*) Recognition of words by position in the sentence.
- (*c*) Recognition of words by comparison.
- (*d*) Independent recognition of words.
- (*e*) Drill in rearrangement of words.

III. Book Work: Reading of the Story as a Whole.

Blackboard steps in the *Progressive Road to Reading* plan. The blackboard steps are illustrated in the three sample blackboard lessons shown in Plate II.

Following the discussion of the blackboard work, the *Manual* says:

> When the child has gone over the entire story, sentence by sentence, in the manner indicated, the book should be placed in his hands so that he may read the story as a whole.

Imagine the relish with which the pupil would attack this

story in the book after he has been given it piecemeal in drill doses, a sentence to the lesson! The plan for the *Story Hour Primer*, somewhat similarly, provides for the reading of three short stories in five weeks.

Difficulty with the slow-approach type of primer. While an occasional teacher may succeed in using the folk-tale for the first series of reading lessons, it appears that the unit is too long and the difficulties too many for the majority of teachers to attempt to use this type of primer for the beginning work. All three of the primers mentioned are very good for use after the class has gained some facility in reading, so the pupils can read the stories fairly rapidly without preliminary rehearsal and drill. Appreciative reading of a story or tale means a rather rapid reading of it.

The Mother-Goose type of primer. There is another class of primers which use the Mother-Goose rhymes for beginning material. The preface to the *Natural Method Primer*, one of this type, contains the following statements:

> This book consists almost entirely of nursery rhymes and of sentences in which the words of these rhymes occur.
>
> Nursery rhymes lend themselves admirably to work in the early stages. Mother-Goose jingles and rhymes constitute the child's introduction to literature, and are the natural means by which the child may be taught to read.

The following headings, taken from the first few pages of the *Manual*, give an idea of the method to be followed in using this book:

LESSON 1, *Pages* 1–4

A. B. C.
Tumble down D
The cat is in the cupboard,
And can't see me.

1. Recitation of the complete rhyme by the teacher.
2. Telling the story by the pupils.
3. Dramatization by the pupils.

4. Questioning to develop content.
5. Writing story on blackboard.
6. Recognition of new words.
7. Pupils read the story.

It will be seen that the short length of this unit gives it a distinct advantage for the beginning stage over the longer folk-tales used in the primers previously mentioned.

A nursery-rhyme type of primer. The *Merrill Primer*, another primer of this general type, begins with the following rhyme:

See-saw! See-saw!
Here we go up and down.
See-saw! See-saw!
This is the way to town.

The two succeeding pages contain repetitions of the phrases and sentences within the rhyme. The following are the headings given in the *Manual* in the detailed discussion of the beginning work:

BLACKBOARD STUDY OF THE FIRST GROUP

Playing See-saw

The use of Picture and conversation; Learning the First Rhyme.
Playing the rhyme.
Learning the phrases.
Learning the words.
Sentences based on the rhyme.
Reviews; the vocabulary of Group I.

After about forty words and phrases have been taught in rhyme and story by using the blackboard, reading in the book is begun. "The reading at first is merely the repetition of the rhyme with eyes following the printed words." The following is the statement of the plan for lessons on the two pages following the rhyme:

The teacher may, for variety, write a phrase or a word on the

board and have the pupils find it on the printed page. Pages 6 and 7 (really 2 and 3 of the reading lessons), where the same phrases and words are found, may be used in this way. On these pages, the children may tell how many times they can find *Here we go*. How many times they can find *up and down*. How many times they can find *down*, etc.

Do not hurry over this work in the early lessons. *Take time enough to have the children comfortably sure that they can find lines, phrases, and words on these early pages*. Experience has shown that the transition from blackboard work to the printed book is comparatively easy if the first lessons in the book are not hurried. Children will enjoy going back and re-reading the stories several times, because they enjoy their mastery of the printed page.

Take care that the children read by phrases and not by single words, and that they read smoothly. Make no special effort at expression in reading at this time. If the thought is clear to the child he will express it sufficiently well.

Summary of conclusions regarding primers. We have pointed out the change in character of the introductory reading matter that has taken place in primers for children, and have shown that the general tendency of present-day primers is to begin with either the folk-tale or the nursery rhyme. The writer believes that the latter furnishes much the better plan because of the shortness of the unit, and because the children do not tire of the natural repetitions in connection with the rhyme.

It is seen that in this plan the problem as to whether we shall use the word or the sentence method has been solved upon a middle ground. Professor Freeman, in discussing this problem, says:[1] "We may therefore conclude that his reading, as his speaking, should begin with words which form the core of a sentence or an expression of thought." This is substantially what is done in the *Merrill Primer*. The same principle is followed in *The Riverside Primer*, which does not

[1] Freeman, F. N. *The Psychology of the Common Branches*, pp. 73–74. Houghton Mifflin Company, 1916.

begin with the rhymes, but begins with phrases in relation to a story about three birds. The *Summers Primer* follows the same principle, but begins with action words and phrases such as, *sing, run, jump; hop, run and jump; jump and run,* etc. In all three primers the repetition is a natural one. The best practice will involve the use of all three types of primers during the first few months, and the introduction of the primers beginning with the folk-tales after the pupils are able to read the first fifteen to thirty pages of these three types of primers.

Relating introductory reading matter to the child's environment. The tendency of present-day primers to use rhymes and stories almost exclusively may lead to an insufficient use of reading material relating to the child's social environment. Recently a number of commendable efforts have been made to supply the defect. The *Nineteenth Yearbook* (1920) *of the National Society for the Study of Education* contains a number of such efforts, from among which the following selections have been taken for reproduction here:

READING EXERCISES BASED ON CHILDREN'S EXPERIENCES

1. Supplied by Miss Abbie A. Atwood, of Janesville, Wisconsin

(The Rock County Fair was held just previous to the opening of school. The school utilized the children's experience in language exercises for two weeks, including telling, dramatizing, and constructing. The result of all this work was the reading material.)

THE FAIR

1. We went to the fair
We saw some cattle.
We saw some kewpie dolls.
We threw balls to get them.
We saw an aeroplane.
It did tricks up in the sky.

ICE CREAM CONES

2. We saw some ice cream cones.
A man sold them.
We bought some.
They cost ten cents.
Ice cream cones are good.
We like them.

THE HAND ORGAN

3. We saw a man and a monkey.
The man had a hand organ.
It made music.
The monkey danced.
We gave the monkey a penny.
He put it in his pocket.
He made us laugh.

THINGS WE LIKED AT THE FAIR

I liked the Merry-go-round,
George liked the races.
Helen liked the kewpie dolls.
Teddy liked the whips.
Louie liked the ice cream cones
Dorothy liked the band.
Roger liked the policeman.

2. Supplied by Miss Elisabeth M. Heil and Miss Clara A. Crowde
St. Louis

THE BALLOON RACE

We saw many balloons.
Some of them were up high.
Some of them were down low.
Some of them were far away.
Some of them were close.
They threw out sand to go up high
They let out gas to come down low.

FIRE PREVENTION DAY

A fireman talked to us to-day.
He talked about fires.
He said fires burn many people.
He said fires burn sheds and houses.
He said not to play with matches.
He asked us to be careful.

3. A lesson following a presentation of a flag to a room

We see a flag.
It is red, white, and blue.
It is our flag.
It has red and white stripes.
It has white stars.
We love our flag.
It will wave and wave and wave.

4. Primary exercises from Lakewood, Ohio

LEAVES

We found some leaves this morning.
We found some maple leaves.
We found some oak leaves.
We found some catalpa leaves.
We made a book of leaves.
It is fun to make a book of leaves.

THE FARM

We played we went to the farm.
We saw some ducks.
We saw some chickens.
We saw some cows.
We saw some pigs.
(Nine other similar sentences)
The farmer's pets talked to us.
The duck said, "Quack, Quack."
The hen said, "Cluck, Cluck."
etc.

BUBBLES

I like to blow bubbles.
The bubbles are round.
I blow bubbles with a pipe.
I dip the pipe in soapy water.
Then I blow a bubble.
I toss it into the air.
It flies away and bursts.

OUR FAMILY

This is the mother.
This is the father.
This is the brother tall.
This is the sister.
This is the baby.
Oh, how we love them all.

Pupil initiative in beginning reading. The school often fails to provide properly for the pupils' initiative in beginning reading. A. E. Moore has given an account of an interesting experiment in the use of children's initiative.[1] The experiment was carried on with a small class in the kindergarten. The following is an outline of the reading activities carried on:

1. Reading children's names in print on cards on back of kindergarten chairs and on lockers.
2. Reading names of colors on crayola boxes.
3. Matching names and colors. Similar puzzle matching involving recognition of words, phrases, and sentences.
4. Making and using signs in correlation with building projects such as — For Rent, Bank, Keep Out.
5. Reading signs and notices — Rush, Please keep off the grass, Cars stop here.
6. Printing by pupils of signs with small type-sets of price and sign markers.

[1] Moore, A. E. "Use of Children's Initiative in Beginning Reading"; in *Teachers College Record*, vol. 17, pp. 330–43. 1916.

7. Making individual books, and matching pictures with phrases.
8. Matching Mother-Goose rhymes with picture illustrations.
9. Use of Mother-Goose books, especially the Greenaway Mother Goose.
10. Making Mother-Goose books, and matching pictures and titles.
11. Beginning phonics by matching initials and names or titles.

In addition to the objective results in terms of the number of words learned, the value of the exercise of initiative, the value of the recognition of the purpose of reading, and the social value, are emphasized. The article offers a number of suggestions capable of use by beginning teachers to utilize child initiative in a helpful manner.

Phonics. A summary of the best thought and practice with reference to phonics is given in the *Eighteenth Yearbook of the National Society for the Study of Education*, and is reproduced here by special permission:[1]

Independence in the recognition of words should be developed in the early grades by means of word-study and phonetic analysis. The practice is followed almost universally of conducting drill exercises in which the basic words which have been presented in reading exercises are learned to the point of instant recognition. Various devices, such as flash-card exercises, finding given words in sentences, phonetic analysis of words, etc., are employed. This procedure finds justification in the results of investigations which have been made of the problem. Judd secured photographic records of children's readings and made an analysis of the records to determine the results of training. The pupils included in the investigation had been trained largely according to the word or sentence method, and were supposed to read primarily for meaning. Instruction of this type had been supplemented by some training in phonics. The pupils were selected with a view to including the poorer readers and the better readers in each grade.

An analysis of the records showed clearly that pupils encountered difficulties in their reading, and that periods of evident con-

[1] Gray, William S. *Eighteenth Yearbook of the National Society for the Study of Education*, pp. 32–34.

fusion occurred from time to time, as evidenced by the fact that the steady forward movement of the eye was interrupted. These complicated series of eye-movements exhibit a failure of recognition to follow its normal course, and suggest that the child was exploring the letters in the words in order to recognize the word as a whole.

The foregoing discussion can be translated into the terms ordinarily used in describing school methods. The word method begins with the assumption that the word is the natural first unit of recognition. As the words become numerous and complicated, the word method usually adds a plan of phonic analysis. The motive of this added analysis is to help pupils to keep out of periods of confusion.

Training a child in the analysis of words may very properly be described as training him in the mechanics of reading. Purely mechanical training is in an important sense in opposition to the purpose of the school in its efforts to make good readers. The school aims to reach the level of fluent synthetic grasp of phrases. Mechanical training does, indeed, temporarily prevent the pupil from understanding the meaning of passages. Mechanical training would not be justified if distractions could be avoided by ready recognition of words.

The final conclusions of this phase of the study were that pupils should be taught to read for content, that the word should be accepted as the unit of recognition at the outset, and that analysis or phonetic training should be introduced later when it is needed to keep the word units clear.

Phonetic analysis should be introduced in special drill periods after pupils have begun to note similarities and differences in the words which they have learned in reading exercises. It is the judgment of the writer that detailed studies of words should be made during drill periods set aside for this purpose. If such studies are made during the regular reading period there is danger that attention will shift from the content of what is read to the study of individual words. If the basic training in the analysis of words is given during drill periods, the information and skill thus secured can be applied quickly and effectively during reading exercises without withdrawing attention from the content of what is read.

A number of progressive schools follow the practice of introducing phonics about the end of the second month of the first

grade. By this time the pupils have learned a limited reading vocabulary and their attention has already been called to the similarities and differences between such words as *ran* and *can*, *cat* and *sat*, etc. In connection with the reading lessons the pupil notes some of the familiar elements in the new words. A suggestion or direction from the teacher leads him to a recognition of the new words by combining familiar elements. After the pupil has met with success a few times in the incidental study of new words he is prepared, psychologically, to begin a systematic study of words and their elements. If such studies are introduced with the first reading lessons, the pupil does not have the background of facts and intelligent interest in words which are essential if words are to be studied quickly and effectively.

What phonic system should be used? This specific problem has not received detailed attention in the literature of reading investigations. It is, therefore, impossible to give a final answer to the question. Effective results can be secured with almost any method in use, as shown by the fact that there are representative schools for each method which rank high as determined by current tests of oral reading. Again, there are schools for each method which rank very low.

In the selection of a phonic system there are two general considerations which should be borne in mind: (*a*) the sounds of the successive elements into which a word is divided should result in a natural and accurate pronunciation of the word when the sounds of these elements are combined; (*b*) the system of analysis which is used should be so organized that the habits developed in the analysis of short words in the lower grades will aid rather than interfere with the accurate analysis of longer words when they are encountered.

The danger in phonic drill is over-emphasis in the early stages of learning to read. The predominant emphasis in method in the beginning stages of teaching reading should be on the recognition of words and word-groups, rather than with word-forms, and phonetic analysis should be introduced later as a key and to help keep word units clear and understandable.

3. The Oral-Reading Stage

The primary stage an oral-reading stage. During the primary stage of reading, which comprises the first and second and probably the third grade, oral reading is the natural method. "The child brings to the reading class a fully developed mastery of many sounds and their meanings. As soon, therefore, as a pupil recognizes the pronunciation of a word, its meaning is suggested to him by its sound." [1] In the general statement of aims it has been indicated that oral reading has some value as an end in itself. The primary stage of reading is the logical stage for the child to learn to read orally. Until the pupil's rate of silent reading overtakes and passes his rate of articulation, oral reading is a valuable preliminary development in the formation of the proper eye-movement habits in reading. The oral reading gives the teacher a rough index of the sort of eye-movement the child is using. If the pupil is a slow, laborious reader, we know that he is making too many eye-pauses, and it is very important that he increase his speed of oral reading. If he has a habit of repeating, photographs of his eye-movement would probably show periods of regression and confusion. This habit must be broken up through practice in quick recognition of words and phrases, and through insisting that the pupil read each sentence without repetition before proceeding to the next.

Rate in oral reading. An important aim in the primary grades, therefore, should be to develop an ease, smoothness, and fluency in oral reading. Most teachers do not recognize rate as an important element in oral reading. Gray's studies in connection with surveys in several of our large cities, involving the definite measurement of the rate of oral

[1] Gray, William S. "Principles of Method in Teaching Reading, as Derived from Scientific Investigation"; *Eighteenth Yearbook of the National Society for the Study of Education*, part II, pp. 26–45.

reading of large numbers of pupils, show that there is a wide variability in the oral-reading rates of pupils in the same half grade. Of course it is not expected that all pupils in a class will read orally at the same rate. But all pupils who are considered as doing successful work in oral reading should read at a rate that ensures the development of the proper eye-movement habits. There should, of course, be none of the racing type of oral reading.

Errors in oral reading. Gray has formulated[1] the following analysis of types of errors in oral reading:

1. Gross mispronunciations, which include such errors in pronunciation as indicate clearly that the word is too difficult for the pupil to pronounce.
2. Minor mispronunciations, which include the mispronunciation of a portion of a word, wrong accent, wrong syllabication, omission of syllable, etc.
3. Omission of words.
4. Insertion of words.
5. Repetition of words or groups of words.
6. Substitution of one word or group of words for another.

Sight errors which do not change the meaning of the sentence or give erroneous ideas of pronunciation had better be overlooked by the teachers, in order not to develop too great a word consciousness.

Expression of the meaning. While pupils should read with correct emphasis and with adequate expression of the meaning and feeling, there has probably been a tendency to over-emphasize "reading with expression." When this is over-emphasized, it tends to develop a stress and strain in the pupil's reading which leads to a lack of ease and fluency. It is important from the beginning to avoid having the pupils form the habit of word-reading. If the pupil reads with the proper expression of meaning, he will group the

[1] *Report of the St. Louis School Survey*, vol. II, part 2, p. 123.

words into thought units, rather than merely call the words one by one. This is called proper phrasing in oral reading. Pointing with the finger, which the pupils do naturally in the early stages of reading in order to help the eye keep the place, is favorable to word-reading. In the beginning stage of reading in the book, the pupils should be supplied with a strip of paper or cardboard, about an inch wide, to place under the line being read to aid the eye in keeping the place. In the first half of the first grade the pupils should be taught to look through the whole of a short sentence before attempting to read it orally, and then read it as a whole or by groups of words. The first-grade reading must necessarily be more deliberate and consequently slower than in later stages. Consequently the sentences should be short. As the child gains in facility in reading, the sentences become longer and the rate gradually increases. Reading with meaning necessitates the proper grouping of words in reading, which means a higher rate of eye-movement and of oral reading than occurs in reading which consists in the mere calling of words.

The main problems of the second and third grades. By the time the child enters the second grade he has learned to read a vocabulary of a few hundred words, has gained some ability in working out new words, and can read independently, with a fair degree of ease and fluency, simple, interesting material. But he recognizes only individual words at a single fixation of the eye, rather than a group of words. Important problems of the second and third grades are to increase his easily recognized vocabulary, develop his analytical power of working out new words, develop habits of eye-movement that will enable him to recognize a group of words at a single eye-pause, and provide conditions favorable to the rather rapid increase in his rate of oral reading which comes naturally following the first year.

One of the best means for accomplishing all of these outcomes is to provide an abundance of interesting and wholesome reading material.

Two types of oral reading. It is well to differentiate oral reading into two types in order to aim for specific outcomes in the development of reading power. Many good teachers use the more difficult advanced material for the reading work of the forenoon, and the easy long units for more rapid sight-reading in the afternoon. In the first type of work the procedure is more deliberate. More time is spent in discussing problems and meanings, attacking difficulties, correcting errors, re-reading, and considering the content in a more intensive fashion. The pupils make preliminary preparation so that the recitation is a second going-over of the material. Literary material that requires careful scrutiny, "that repays thoroughness of study and discussion, that challenges thought, arouses emotion, and vitalizes ideals," would of course be taught under this first type of procedure. Poetry would be taught by this method except without preliminary preparation by the pupils.

Under the second type of procedure the pupils do not read the material previous to the recitation. The material is easy. The pupil is carried along by his interest in what is coming next in the story. The reading proceeds more rapidly because there are fewer difficulties, less deliberation, less discussion. Each pupil has opportunity to read a larger amount orally. This type of reading is favorable for the development of the proper eye-movement habits in reading. The pupil gains an ability to recognize a group of words instead of merely one word at a single pause of the eye. The pupil is getting an extensive type of experiential reading which it is impossible for him to get if all of the oral reading is of the slow, thorough type.

Under the first type he is developing power to meet and

overcome difficulties, learning to analyze and synthesize, increasing his vocabulary through deliberate consideration of new words, and receiving experiential reading of the deliberative type needed in all forms of careful reading. The first trains for the study type of reading. The second trains for the rapid recreative type of reading. Both are needed. Skill is required of the teacher to be able to select the material best adapted to each.

Phrase-flashing. A drill exercise that has been found helpful in developing the power to recognize a group of words at a single eye-pause, to lengthen the span of attention during a fixation of the eye, is phrase-flashing. The following are some sets of phrases and short sentences that have been formulated and used in one school:

The boy began	The dog ran
to walk	into the yard
to cry	in the yard
in earnest	out of the yard
to jump	through the yard
in bed	into the house
to laugh	around the house
etc.	etc.
The boy walked.	Walk to the chair.
The horse ran.	Run to the chair.
A bird sang.	Run to the door.
The frog jumped	Walk to the window.
A boy jumped.	Move the chair.
The boy rode.	Move the desk.
etc.	etc.

The manipulation of the flashing is very important, and very difficult to do to the best advantage. One way is to have the phrases printed on strips of thin stiff cardboard, about four inches by eighteen inches. The letters should be about an inch high. The printing can be done with a rubber-stamp outfit by one skillful in handling it. The

important thing in flashing is to effect a very short exposure at a stationary position, in proper position with reference to the pupils' eyes. This may be accomplished by placing a cardboard about ten by eighteen inches in front of the set of phrase-cards, and exposing the phrase-card immediately above the screen card. In exposing the card the teacher must be careful that the lower edge is parallel to the floor, and that the card is vertical with the floor rather than tilted back toward the teacher. The pupils should see the phrase in stationary position instead of in motion. The exposure should be only instantaneous, as a single eye-pause is only a small fraction of a second. The idea is to allow time for only one eye-fixation. If it is possible to have a stand for the flash-cards to rest on, all of these conditions may be fulfilled by removing the screen card from in front of the card to be exposed and replacing it immediately. In many schoolrooms the blackboard ledge will serve the purposes of a stand.

The drill period for phrase and short-sentence flashing should be brief, and should occur two or three times a week. The slow, laborious readers should be given drill of this type, while the other pupils are permitted to read for pleasure. Games may easily be devised to make the drill a pleasure to the pupils.

Audience reading. Audience reading should begin in the first grade. Most of the reading work of the primary grades is done by having all the members of the class have the same material before them. It is difficult if not impossible to have the pupils feel a real audience situation under this condition. After the child has gained some facility in reading, he should have experience in reading material to the class which the class does not have in hand, in order to develop a consciousness on the part of the child that the ultimate function of oral reading is to read something to

somebody. It is very natural for the child, if he does not have experience in reading under a real audience situation, to develop habits which entirely overlook the idea of conveying the content of the reading matter to some one. We realize this later when we have a pupil attempt to read something to the class. The proportion of the audience-reading to the non-audience reading should be gradually increased from grade to grade. Detailed methods and devices for audience reading are given in the chapter on "Audience Reading."

4. Silent Reading

Certain points with reference to silent reading in the first two grades should be emphasized here.

First grade. While the primary grades constitute primarily an oral-reading stage, the use of the silent-reading method should be introduced toward the middle of the first grade, and its use gradually increased. The easiest way to begin the silent-reading work is through the use of action sentences, such as "Roll the ball." In this type of work the child does not read the sentence orally. He reads it silently, and then does what he thinks the sentence says. There are a number of primers which have lessons of this type, but unfortunately, teachers have not generally recognized the advantage of differentiating the handling of these lessons by omitting the oral reading. Even when these lessons are headed "For Silent Reading and Acting," most teachers use the oral-reading procedure. Material for this type of reading is given in Chapter VII.

Second grade. In the second grade the teacher should begin to get a rather definite measure of the pupil's rate of silent reading, and of his ability to comprehend what he has read without the assistance of oral reading. The *Barnes Second Reader* provides definitely for both, and the *Teacher's*

Manual gives the detail as to how to use the silent-reading lessons. The riddle and the fable are the types of material used in these lessons. Kendall and Mirick say:

> There should be frequent exercises in silent reading, not followed by oral reading, but by spirited questioning that does not go too much into detail. Its aim is to bring out the salient points, to make sure that the silent reading has given a grasp of the selection as a whole.[1]

In the volume just quoted from above, the authors say, regarding habits of study:

> The work that a pupil does at his seat is no less important than what he does in class. The habits of study formed in these early years will certainly either help or retard his future student life. The teacher must not be misled into the belief that the pupils will naturally apply in their study the good methods of work that are employed in the recitation period. . . . The teacher will then need to teach the pupils how to set tasks for themselves. Some of the following suggestions may be helpful:
>
> Make a list of new words
> Of the people in the story
> Of words hard to pronounce
> Of words hard to spell
> Of places in the story
> Of birds, flowers, or trees
> Suggest a different title for the story
> Tell how many incidents it contains
> Compare it with another story and give reasons for preferring one or the other
> Tell which person you like best, and give reason

Extensive reading in the second and third grades. In the second and third grades, in addition to the silent reading the pupils do, for specific purposes, during study and recitation periods, they should do a considerable amount of silent reading merely for the pleasure of it. This may be done during the spare time in school and at home. Each room should be supplied with a miscellaneous set of easy, attractive reading books for this purpose. Both from the stand-

[1] Kendall and Mirick. *How to Teach the Fundamental Subjects*, pp. 31–32. Houghton Mifflin Company, 1915.

point of developing the proper reading habits and abilities, and from the standpoint of providing valuable educational experience, there should be considerable amounts of rapid extensive reading during these grades.

Emphasize comprehension. Comparison of results in Cleveland and St. Louis show clearly that there is danger in over-emphasizing agility in reading difficult material aloud, without the proper emphasis upon the comprehension of what is read.[1] Scientific studies, as well as the experience of teachers, indicate that it is not an uncommon thing for facility in phonetic analysis and articulation to outrun comprehension. These facts emphasize the importance of gradually increasing the time devoted to reading instruction under silent reading methods in the second and third grades. But under both methods the "thought getting" process must be continually emphasized. On this point the St. Louis *Course of Study in Reading* says:

> Indeed it should be a specific purpose of the third grade as well as of the second grade to make pupils unwilling to leave a passage that is not comprehended. Too much emphasis cannot be laid upon the principle expressed earlier in this report, that the habits formed in the first reading experience, and the set of the mind toward the act and purpose of reading, must be right from the start.

The too-slow group. The St. Louis *Course of Study in Reading* contains the following suggestion, regarding one type of pupil, which is worthy of careful consideration and application:

> The small group of slow readers needs to be taken care of early. The teacher should carefully choose parts for them to read that contain a minimum of difficulties, and they should be given much practice, under the direction of good readers of the class, in reading

[1] Gray, W. S. "Study of Emphasis on Various Phases of Reading Instruction in Two Cities"; in *Elementary School Journal* (November, 1916), vol. 17, pp. 178–86.

stories of less difficulty than belong to their grade and quarter. The slow readers must not be fighting obstacles at every step; they must be given content that they can handle with reasonable independence. This, of course, means that the slow group needs some minutes that will be devoted particularly to them. The rapid readers need not be penalized to listen; they may well be rewarded by being allowed to go off to read silently for their own pleasure.

Silent reading for pleasure and for home recreation should be encouraged. Exercises in silent reading, as suggested in Appendix A on that subject, should be a part of every week's program in the third grade. The main purpose of these should be neither memory nor speed, but selection and organization of meaning in progressively larger units.

Increasingly larger thought units. In the beginning stage of reading the sentence-word is the thought unit adapted to the ability of the pupil. Gradually we increase the length of the sentence. In the second grade the paragraph is the unit of thought. In the third grade the pupil should be able to divide the whole selection into groups of paragraphs. The pupils should be encouraged to look for the important, the large thought in what he reads. The silent reading and discussion of the story as a whole aids the child to conceive the story in its larger units, rather than in haphazard, broken fragments, as so often occurs in the usual oral-reading method.

The detailed methods, devices, and lesson illustrations for primary silent reading are given in later chapters on silent reading.

Vocabulary. While reading should always be for purposeful thought-getting, it is fundamental that the child acquire an ability to recognize words and groups of words easily and quickly. *The Riverside Primer* and *First Reader* set a standard, with reference to the recognition of words, by listing in the back of each book a "Fundamental Vocabulary" of one hundred words, which all first-grade

pupils are to be able to recognize. There should be a list of this kind for each half grade, and the pupils should occasionally be tested upon the ability to recognize the words with facility. Kendall and Mirick [1] set the following standards of vocabulary attainment:

> It may be said that by the end of the third grade children who are not hampered by their customary use of a foreign language ought to be able to read nearly everything within the range of their individual or related experience. This would mean that they will have a reading vocabulary of about one thousand words, and an ability to read much that contains scattered words outside their vocabulary.

The Jones vocabulary standards are discussed in the chapter on "Tests."

PROBLEMS FOR STUDY AND DISCUSSION

1. List four values of oral reading in order of importance.
2. In most school systems, there is a much larger percentage of non-promotions in the lower first grade than in any other half grade. Why is this? To what extent can you justify it? To what extent is it due to reading standards that are too high? To what extent is it due to a course of study in reading that is not sufficiently adjustable to individual differences?
3. Why is oral reading more necessary in the lower grades than in other grades?
4. Formulate a plan for testing the oral reading of a class that would give a reasonably accurate general estimate of the oral-reading achievement of each pupil and that would be economical in the time required. How often should the second- and third-grade classes be tested in oral reading?
5. What do you consider to be the most important aim of the reading instruction in the grade you teach or contemplate teaching?
6. Give two illustrations of material suitable for each of the two types of oral reading described on page 55.
7. State the main reason usually advanced in opposition to phonetic analysis and drill in the first two grades; the main reason in favor of

[1] Kendall and Mirick. *How to Teach the Fundamental Subjects*, pp. 33–34. Houghton Mifflin Company, 1915.

systematic phonic teaching in these grades. Which has the greater weight with you?

8. In the light of the discussion on primers, evaluate the primer or primers used in your school in the beginning reading lessons.
9. Discuss special ways of meeting individual or group needs that will realize the maximum development of the forward, the average, and the backward pupils.
10. Criticize the general statement of aims and outcomes on pages 37–38.

CHAPTER IV

TEACHING READING IN THE INTERMEDIATE AND UPPER GRADES

1. In the Intermediate Grades [1]

Radical change in method. The fourth grade should be radically different in the method of handling the reading instruction from that characteristic of the second grade. While in the primary grades the oral-reading method predominates, in the middle grades the silent-reading method should predominate. The justification for this change of emphasis is well stated by Dr. William S. Gray [2] as follows:

A first-grade pupil is able to pronounce words more rapidly than he is able to recognize them, but during the second and third grades his rate of recognition equals or surpasses his rate of pronunciation. By the time the pupil reaches the fourth grade, he has mastered the art of reading well enough to use it independently. The result is that he begins to read more rapidly than during the earlier grades. He becomes interested in the content of what he reads, and, because his vocal chords react somewhat slowly, his eyes run along the lines more rapidly than he can pronounce the words. It is evident that under these conditions speed in recognition becomes an enemy of excellence in oral reading. These facts justify the contention that less emphasis should be given to oral reading during the intermediate grades and greater opportunity should be given for the development of effective habits of silent reading. Further justification for this change of emphasis is found in the fact that a fourth-grade pupil of average ability has usually mastered the mechanics of reading so well that he is able to pronounce at sight words which he is unable to understand. When-

[1] At this point the reader should review the discussion of the values of oral reading and the general statement of aims and outcomes as given in the first part of Chapter III.

[2] *Elementary School Journal* (April, 1919), vol. 19, p. 609.

ever a pupil has reached this stage in his development, additional mastery of word pronunciation is less important than increased mastery of meanings. These meanings are best secured by the pupil's coming in contact with words and sentences time after time until a body of meaning is built up in regard to them. A large quantity of reading with emphasis on the thought side, such as was recommended for the second and third grades, aids greatly in the development of meanings. The change of emphasis from oral reading to silent reading in the intermediate grades gives added opportunity for concentrating attention on the content of what is read.

Again, the curves of progress for rate of silent reading reveal the fact that progress in rate of reading is very rapid in the second and third grades, is less rapid in the intermediate grades, and approaches a maximum in the sixth and seventh grades. Numerous investigations of progress in reading show that by the time pupils reach the sixth grade their habits of careful silent reading have been more or less permanently established. It is evident, therefore, that the intermediate grades represent a period during which the rate of reading may be emphasized to advantage. If rate is not emphasized until later, it is probable that improvement in rate, if secured at all, will be attained only through the expenditure of much more time and effort than is required during the intermediate grades.

Emphasis on content and major values. Along with the change from the oral- to the silent-reading method will come increased attention to the content of what is read. This will involve attention to the major thoughts of the unit as a whole, and consideration by sections and paragraphs. The middle grades, being largely free from the obligation in relation to oral reading, have increased opportunity and obligation in the interpretation of the content read.

The plan used in some reading texts of listing difficult words, with definitions at the beginning or end of the selection, tends to mechanical memorization of definitions and to isolated consideration of word-meanings in the recitation. The consideration of the meaning of individual words, with-

out any relation to a problem or to the interpretation of the content, is altogether too common. Skillful teachers are learning how to frame problems and exercises which involve a scrutiny of individual words in relation to a larger purpose.

Word-study. While the primary grades develop phonetic analysis, the intermediate grades should develop an ability to analyze words into their meaning elements. There should be a study of prefixes, suffixes, root words, synonyms, and antonyms. The purpose of teaching phonics in the lower grades is to give the child a means of working out the pronunciation of words the meaning of which he already understands. It has been noted that facility in pronunciation may easily outrun comprehension of meaning. While pupils should gain a facility in recognizing the meaning of words through the context, they should also be given the means of working out the meanings of unknown words through analysis of the meaning elements, and through the economical use of the dictionary and other helps. In the middle grades there should be a systematic study of words in relation to meaning, as there is a systematic study of phonics in the primary grades. Just as the phonics should be taught in a separate period, and applied by the pupils in their reading, so should the word-meaning study be taught in a period separate from the reading period. A certain amount of exercises in spelling and language will help in the development of a feeling of meaning for a large vocabulary. Special exercises in connection with vocabulary development in reading are given in Chapter VIII.

Extensive reading. In order to develop the proper background of meaning, there should be extensive reading of all types of material that give the child valuable experience. The traditional point of view in relation to the reading course for the middle and upper grades has been to have

a few well-selected units studied intensively, with oral rendition following minute analysis. The point of view now coming to be more generally accepted is to have large amounts of reading done in these grades, to provide the pupil with a vicarious type of experience, to develop efficient reading habits, and to develop the habit of reading for recreation. The new St. Louis *Course of Study in Reading* contains the following paragraph:

> Every sort of literature is proper to these years — epic stories of adventure and romance, ancient and modern, the great mythic cycles, lyric poetry, drama, Bible selections, general prose literature including biography, history, romantic fiction, appreciation of nature, animal tales, stories of industrial development and of industrial heroes — everything of a significant import. There should be very much in the course for extensive reading, covering a great variety of interests, fitted for rapid perusal and fairly easy grasp of idea, whose spirit or story or information may be caught as a whole, and appreciated and critically scrutinized as a whole. Much of it, with a content that repays thoroughness of study and discussion, that challenges thought, rouses emotion, and vitalizes ideals, should be subjected to intensive study.

In his book, *The Curriculum*,[1] Professor Bobbitt devotes a chapter to "Reading as a Leisure Occupation." He says:

> The readings from the beginning to the end of the course, to the end of life itself, need to be as wide and varied as earthly life and to give an adequate revelation of all major types of human experience, in all portions of the world, and with such historical perspective as is needed for each of the various regions.

He enumerates four types, as follows:

1. First it will present a revelation of man in his present dispersion over a diversified planet: travels, geography, ethnology, descriptive sociology, anthropology, etc.
2. A second series of readings will construct the historical back-

[1] Bobbitt, Franklin. *The Curriculum*. Houghton Mifflin Company, 1918.

ground: biography, travels (during past ages), history, memoirs, evolutionary sociology, etc.

3. A third type will reveal the essential nature and relation of things: science readings, mathematical, physical, biological, sociological, technological, etc.
4. A fourth type of reading is literature, in the narrower sense. It aims to present anything that happens to be chosen as its theme. Clearly literature is not coördinate with the others. It cannot be separated from them.

The following paragraph, also by Professor Bobbitt, gives a stimulating conception of extensive geographical reading: [1]

Let us note some of the more detailed implications, beginning with the geography. In the primary and intermediate grades, in addition to the widest practicable direct observations, there will be stories about things that make up the world in general. Much must be oral; but beyond the first grades most of the stories will be read. The book-trade is rapidly providing suitable books. Here are a few titles taken at random: *Little Folks of Many Lands, Eskimo Stories, Around the World, The Wide World, Big and Little People in Other Lands, The Dutch Twins, The Japanese Twins, Little Journeys to China and Japan, Travels in Scotland, Gerda in Sweden,* etc. The more literary the stories can be, in the sense of presenting a true and clear and interesting reconstruction of life and its background in the various regions, the better for the educational experience. The readings offered at present have largely been developed in an educational age of didacticism and fact-memorization, and are often so freighted with information that they do not reconstruct life so that it can be visualized, and relived in imagination. Many books, however, particularly the more recent, have avoided the pitfalls and fallacies of didacticism. They simply present interesting stories that comply with literary canons. They give no appearance of an attempt to be "informing." They are presented upon the sane theory that if children are permitted to enter vividly into the life of a country and view conditions as they are, they will have intelligence enough to see the things that are there, and to carry away a sufficient residuum of memories.

Training in silent reading and study. The Gray curves

[1] Bobbitt, Franklin. *The Curriculum*, p. 231. Houghton Mifflin Company, 1918.

of progress for silent-reading attainment in rate indicates that the pupil's silent-reading rate is fairly well fixed by the end of the sixth grade and that improvement after this time usually is effected with a greater expenditure of time and energy than before. According to Gray, the intermediate grades is the period during which the largest emphasis should be placed upon training exercises in developing speed and improving comprehension. Special methods and devices for such training are given in Chapter VIII.

In view of the fact that the middle grades may constitute the critical period in the development of efficient silent-reading habits, it is highly important that the attainments of the pupils in silent reading should be regularly checked up by the use of standardized reading tests, and by tests formulated by the teacher in connection with material at hand. Careful study of the results of these tests will aid the teacher materially in planning the reading instruction for the greatest benefit of all her pupils.

Individual differences. The use of scientific tests have emphasized the wide individual differences in reading achievement. It is common to find the fastest readers in a class reading silently four times as fast as the slowest ones. We find the same wide variation in the comprehension scores. The individual differences are much more marked in the middle grades than in the upper grades. How shall class instruction deal with these differences? Are we justified in holding together in a single class pupils so widely separated in rate or quality of reading? Shall we substitute individual instruction in reading for class instruction? Judd says:[1]

There are vast individual differences in pupils. There is also the practical necessity of dealing with pupils in groups. The prob-

[1] *Reading: Its Nature and Development*, Supplementary Educational Monographs, vol. II, no. 4, p. 175.

lem is how to recognize individual needs and at the same time economize effort by working with groups. The solution of this problem will be found only when analysis of the process which is being taught reveals those aspects which are common to all the members of the class and those which must be dealt with individually. When analysis has brought out these distinctions, it is the duty of the school so to organize its instruction as to provide for both class instruction and individual instruction. There can be little doubt that teaching in groups has been overdone. Individual instruction based on analysis of individual performances is called for as one of the most important innovations to be worked out in the schools. Individual instruction, when it is properly worked out, will not be a chance concession to personal caprice, but a systematic analysis of individual performances followed by an adaptation of instruction to individual levels of achievement.

Reclassification on basis of individual needs. The teacher of a room of two classes will find, through careful observation and testing, that each class contains different types of readers who vary widely in reading achievement. Each will contain the slow reader who comprehends poorly, and the fast, careless reader. Each will contain the fast reader who is excellent in comprehension, and the medium-rate reader who is good in comprehension. For a part of the reading instruction the most practical thing to do would be to rearrange this room of forty to fifty pupils into two, three, or four groups, according to types of readers as determined by scientific tests and the teacher's personal knowledge of the pupils. Then each group could be given material of a difficulty suited to its ability and interest. Methods of instruction could be varied to suit the needs of the specific group. Special cases of extreme backwardness in reading would best be taken care of in an ungraded room, if this is possible. Some schools have reported good results from having the best silent readers act as individual teachers of the poorer ones.

Oral reading. A relatively small proportion of time in

the intermediate grades should be devoted to oral reading. Some poetry, chiefly in the form of ballads or narrative poetry, such as "Horatius at the Bridge," should be taught by the oral-reading method. In the case of the very slow silent readers in these grades, phonetic analysis and oral reading will be found helpful in developing proper eye-movement habits. There should be some audience reading in each term's work. In these grades, wherever possible, there should be a real audience situation in connection with the oral reading. A very good rule to follow in these grades is not to have the material read orally unless you have a good specific reason for the oral reading. In connection with long units used for silent reading, it is advisable to have pupils choose funny parts, witty sayings, climaxes, most interesting paragraphs, etc., to read to the remainder of the class as audience reading.

Summary on intermediate-grade work in teaching reading.

1. The two leading aims in reading instruction in the intermediate grades are to bring the rate and comprehension in silent reading to a high level of efficiency, and to provide large amounts of vicarious experience through extensive silent reading.
2. An abundance of material of a great variety of types, covering all phases of life, full of action and spirit, should be provided for extensive silent reading.
3. A variety of effective methods should be employed to center attention upon the content during the study time, as well as during the class period.
4. Special silent-reading training exercises should be used with the class as a whole, and with special small groups, for the purpose of bringing the rate and comprehension of every individual to the highest level possible.
5. There should be systematic lessons outside of the regular reading lessons, to develop ability to determine the

meaning and pronunciation of words through word-analysis and the use of appropriate helps.

6. The greater part of the oral reading should be organized about real audience situations that provide sufficient motive to secure effective effort. Narrative poetry appeals to pupils of these grades, and should be studied and read orally as pleasurable experience.
7. Tests in rate and comprehension in silent reading should be given regularly to determine both the level of achievement of the class and of each pupil, and to aid the teacher in working out better means of classifying and instructing the pupils in accordance with their needs.

2. In the Upper Grades

The problems of reading in the upper grades (seventh, eighth, and ninth) in some respects are similar to those in the intermediate grades. It is not uncommon to find pupils in these grades who are two or three years below the standard in silent reading. The slow, laborious readers are still in evidence. It will still be necessary to have training exercises, but, if the reading instruction in the intermediate grades has been properly done, this phase will not need as much time as in the preceding grades.

Speed development in the upper grades. It has already been noted in Chapter II that, according to Mr. John A. O'Brien's study, there are large possibilities of speed development in the upper grades. His conclusions with respect to this important point are as follows:[1]

1. Marked increases in rate can be effected in the upper grades

[1] O'Brien, John A. "The Development of Speed in Silent Reading"; in the *Twentieth Yearbook of the National Society for the Study of Education.* Public School Publishing Company, Bloomington, Ill., 1921.

when speed in reading is set as a definite problem for the pupils.

2. When training in rapid silent reading is given to pupils not previously trained therein, the increase in rate tends in a general way to advance *pari passu* with the advance in the grade; the higher the grade, the greater is the increase in rate.
3. As compared with the gains which can be readily effected by systematic training in rapid silent reading, the increases ordinarily obtained in rate in the upper grades are so small as to indicate a condition almost pathological in character. They constitute a serious indictment of the present school régime in the teaching of reading, with its grotesquely misplaced emphasis on oral reading and its utter neglect of reading in the true sense of the term — the silent interpretation of the printed symbols.

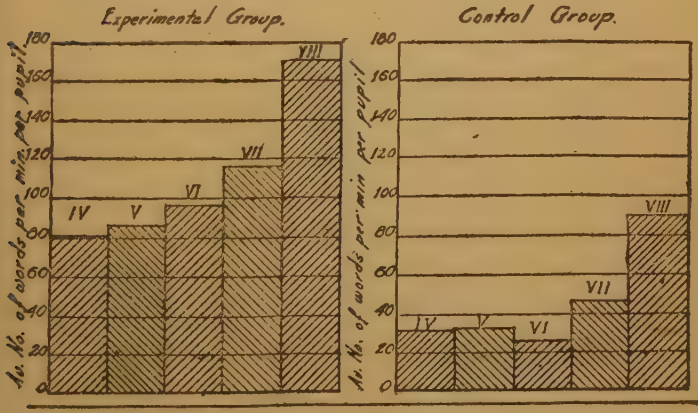


FIG. 11. O'BRIEN'S GRAPHS SHOWING THE AVERAGE GAIN IN RATE FOR GRADES IV TO VIII, AS DETERMINED BY THE COURTIS SILENT-READING TEST

Fig. 11 illustrates Mr. O'Brien's conclusion that the higher the grade the greater the possibility of speed development. This increase in speed was obtained without any impairment of comprehension. It should be noted, how-

ever, that checks on comprehension accompanied the speed exercises. The speed development attained was measured by the pupil's rate of reading very easy narrative material.

Variability in reading attainment within upper grade classes. If one of the leading aims of reading instruction in the intermediate grades, to bring the rate and comprehension in silent reading for all pupils to a high level of efficiency, has been effectively carried out, the variability of attainment in the upper grade will not be as great as in the intermediate grades. But all the studies reported show that, under present conditions in the schools in general, we have widely separated levels of reading attainment in most any upper-grade class. To attempt to have a large group of pupils with marked individual differences in reading attainment use the same reading material under the same method of instruction will inevitably result in discouraging results. On the basis of the scores of two or more standardized tests and of the teacher's judgment, the pupils of a room should be classified into three or more groups and each group given material and training in accordance with its level of attainment. More detail as to how to make these special groupings is given in Chapter X.

Extensive silent reading. In his chapter on "Reading," Professor Bobbitt says,[1] in describing the reading work of the grammar grades:

> For the grammar grades, it is the same world-pageant that is to be observed by way of further deepening and extending their understanding and sympathies. They too will read accounts that permit them adequately to visualize life in its totality in the various lands. These are to be selected for their more mature understanding, however, and should reveal a wealth of details and relationships not possible on the earlier levels. The stories require for effectiveness in the reconstructions the same types of literary

[1] Bobbitt, Franklin. *The Curriculum*, pp. 233–34. Houghton Mifflin Company, 1918.

merit; and absence of didacticism. If children do not acquire this habit of world-wide observation of human affairs during school days when the instincts are most fully awake as a healthy and satisfying leisure occupation, they are not likely to continue it during the years of adulthood. It is this continuance at which education should principally aim. This is immeasurably more important at this period than the memorization of deciduous information. But it will take care of the information, — and on the sound presumption that most of it normally is deciduous. Let them develop their appreciations and their habit of world-observation as a satisfying leisure occupation, and the amount of genuine information they will have on tap will be enormously increased. And when they need other information they know how to acquire it expeditiously. But let them during grammar grades simply be dosed with didactic facts, then when adulthood is reached, they will neither have the facts remembered, — except where the learning was accidently experiential, — nor those habits of observation of world-wide affairs which should constitute the most important non-physical leisure occupation of adulthood.

What shall be the criterion for choosing literary units? In recent years there has been a growing tendency for reading texts for the upper grades to consist almost entirely of classical literature, drawn from the writings of American and English authors. In opposition to this point of view, the writer just quoted says:[1]

Now for developing the leisure occupation here discussed, the literature to be selected is that which will give the widest and fullest and most effective possible revelation of the world as a whole in its multifarious divisions and aspects. Any selection will be chosen not upon the basis of literary form or structure; or nationality of the writer; or language in which he originally wrote; or of the age in which he lived; or recency of the selection; or fame of the author. It is simply a question of whether it presents a clear window through which one can look out upon existence. If it does not, then it matters not how famous the author, or how difficult the selection, or what the wealth of footnotes, it cannot be good for the purpose here defined.

[1] *Ibid*, pp. 237-38.

Acceptance of this latter purpose must work profound transformation in both spirit and content of the literature curriculum. Selections will be chosen for their content-value. They will aim at the greatest possible width of vision, historical perspective, and depth of insight. The curriculum will draw upon the literatures of all lands.

The purpose demands catholicity of theme. The literature should reveal war, personal adventure, love, brigandage, philanthropy, religion, travels, poverty, family life, commerce, agriculture, industry, transportation, government, the struggle with nature and with disease, conflicting social classes, the labors of science and technology; and the other major ingredients of human existence. As literature rings the changes upon these things for different historical periods and in different portions of the world, its field is interminable and presents material for a rich and satisfying lifelong leisure occupation. It is the business of early education to start youth upon this inspiring program; to bring him to love it as he loves the simpler visual drama upon the stage or screen; to develop habits in this field that are satisfying and permanent for the intellectual illumination of a lifetime.

The problems of difficulty and amount. The most common current method of teaching literature in these grades is a slow, laborious process of minute analysis and explanation. This is due partly to the fact that too difficult selections are oftentimes provided. Chubb says:

> If much labor on words, constructions, allusions, and so forth (those precious minutiæ) is much needed in order that a work may be understood, then it is mischosen for the grade. [1]

Bobbitt says:

> As a matter of fact, reading should be easy, rapid, interesting, so that much ground will be covered within the available time and also, so that it can be done chiefly because of inner motives. . . . Any selection that is so difficult as greatly to impede progress thereby proves that it belongs on a later level. The way to make

[1] Chubb, Percival. *The Teaching of English.* The Macmillan Company, 1902.

reading easy and rapid and pleasant is to have *much* reading from the first grade onward; an ever increasing quantity from grade to grade.

Kendall and Mirick say:

Some books should be allotted one period for discussion; others call for two or three periods; but few, if any, books or poems will return a profitable yield for an expenditure of eight or more lessons.

Readings in community and national life. One of the main problems in the grammar or junior-high-school grades is to provide material for the reading course that appeals to the early adolescent's changing view of life, that appeals to the idealism of the adolescent, that develops his awakening interest in social, civic, and occupational problems, and that can be read with sufficient ease and rapidity that the experience is an enjoyable one. Classic material in the sense of making a universal appeal should be used, but not exclusively. The pupils should develop a permanent interest in reading and discussing current events. Current literature and selections bearing on modern social and civic problems and on topics of vocational interest should constitute a part of the reading course in the upper grades. Reading material on personal and social hygiene, accident prevention, fire prevention, food and fuel conservation, industrial developments, and other community problems, may legitimately claim a share of the program reading time. [1]

Oral reading. There is more justification for oral reading for social and recreational purposes in the early adolescent period than in the preceding period. The group instinct characteristic of this period makes favorable the entertain-

[1] In 1918 the National Bureau of Education published the following: *Lessons in Community and National Life:* Series B, for Upper Grades, 264 pp.; Series C, for Intermediate Grades, 264 pp. Price 15 cents a copy, each. These may be obtained from the Superintendent of Documents, Washington, D.C., and will be found very helpful for supplemental work.

ment of one group by another group through dramatic and other forms of audience reading. Larger uses can be made of poetry in this period than in the preceding one. But since poetry is a more difficult form of reading than prose, it is very important to select units that can be read with sufficient ease to ensure genuine enjoyment. Oral reading, however, should constitute a minor phase of the reading instruction in these grades.

Summary on upper-grade work in teaching reading.

1. The problem of the development of speed and comprehension continues into the upper grades, although, if the reading instruction in the intermediate grades has been effectively done, the proportional time devoted to this aim will be less than in the intermediate grades.
2. Much extensive silent reading, of relatively easy material of well-recognized worth in giving the pupils a "wide observation of human affairs" and in developing high ideals and worth-while interests, should be done by all upper-grade pupils.
3. For the upper-grade pupils who have attained a reasonably high level of rate and comprehension, there should be increased opportunity for experience in enjoying literary material with catholicity of theme drawn from the great literatures of the world. The upper-grade period has increasingly greater possibilities in the study of poetry.
4. The group instinct characteristic of the early adolescent period increases the opportunities of realizing the social values of oral reading. Considerable of the oral reading should involve a real audience situation. But the oral-reading type of recitation should be given a minor portion of the total reading recitation time of any upper-grade group.

5. In selecting material for upper-grade groups caution should be used not to select material too difficult for the mental and reading attainment levels of the group.

PROBLEMS FOR STUDY AND DISCUSSION

1. Discuss special types of classification for meeting individual or group differences in reading ability.
2. What do you consider to be the three most important aims of the reading instruction in the intermediate grades? In the upper grades?
3. What are the essential conditions necessary to real audience situations in oral reading? Is it sufficient merely to have the pupils close their books while one pupil reads orally his section of a selection previously read by the class?
4. Examine a course of study in reading for a particular grade and determine to what extent it fulfills the content requirements indicated in this chapter. Consider its provision for material: (*a*) for audience reading; (*b*) for training in silent reading; (*c*) for reading of the extensive type; (*d*) for intensive literary study; (*e*) for individual reading; (*f*) for special group reading.
5. Choose five selections from readers or from courses of study that you think are too difficult for the grade for which they are listed.
6. Discuss the fundamental reason for a radical change from the traditional oral-reading method above the primary grades.
7. Give specific illustrations of pupils not being able to succeed in school subjects other than reading on account of poor reading ability.
8. About what portion of the program reading time in the intermediate grades should be devoted to poetry? In the upper grades?
9. Discuss the proposal that, in the intermediate grades, there should be systematic study of words in relation to meaning, in short periods, separate from and independent of the regular reading lesson.
10. Compare the aims of reading instruction in the intermediate grades with the aims in the upper grades and note differences.
11. Evaluate O'Brien's conclusions with reference to the development of speed in the upper grades.

CHAPTER V

APPRECIATION AND MEMORIZATION

1. Developing Appreciation

Why we have failed in awakening appreciaton. Appreciation of literature as one of the leading aims in reading instruction is probably more often given than any other. Yet it is continually being seriously questioned whether the schools are developing the proper emotional attitude toward reading. The question naturally arises, Why have our schools so often failed to develop appreciation? The following answers to this question may be given:

1. There has too often been a lack of genuine appreciation by the teachers themselves of the best in classical and current literature suited to the tastes and interests of the pupils.
2. The usual slow procedure of minute analysis and oral reading of all the material has tended to bring about a dislike for reading and an unfavorable attitude of mind toward literature. Miss Earhart says:[1] "In literature we frequently limit our efforts to following the thread of the thought, to getting the pronunciation and meaning of words, and to training in oral reading. . . . If nothing more than this is done, much of the power of the pupils to appreciate will remain dormant." Teachers in the intermediate and upper grades, as a rule, have failed to utilize oral reading to the best advantage because they have had all the material

[1] Earhart, Lida B. The "Arousal and Guidance of Appreciation," chap. x, of her *Types of Teaching*. Houghton Mifflin Company, 1915.

read aloud, instead of only those parts essential to appreciation.

3. There has been too great an appeal to the intellectual faculties of memory, judgment, and criticism, and too little stress upon the values of human life, its virtues, ideals, trials, and struggles, as portrayed through the printed page. Teachers have too often failed to conceive reading as experience "lifting the individual human consciousness to the highest potential of human feeling." There has been too much attention to constructions, classification of parts of speech, and other matters of form and too little emphasis upon the essential content values.
4. Effort has been wasted in trying to force adult literature and adult standards upon children. Very often the reading provided in the middle and upper grades has been too difficult, both in content and in vocabulary. This has inevitably led to the errors in method enumerated above.
5. What has been accomplished has been due largely to the enthusiasm and intuitive wisdom of the naturally superior teacher. Teachers have not been instructed in the psychology and pedagogy of appreciation. Only in recent years has the term "appreciation lesson" been discussed in educational literature. The need of rationalizing the teacher's method in developing desired attitudes of mind toward reading is an important one.

The nature of appreciation. Charters says:[1]

> The purpose, or function, of teaching is to assist pupils to appreciate and control the values of life. . . . To appreciate means to estimate properly. . . . We are well acquainted with appreciation

[1] Charters, W. W. *Methods of Teaching*, 1912 ed., pp. 9 and 21. Row Peterson Company.

as implied in ideals. . . . Literature is said to have its chief value in giving children such ideals.

Strayer and Norsworthy say: [1]

Appreciation belongs to the general field of feeling rather than knowing. . . . Appreciation involves the presence of some intellectual states, but its addition makes the total complex of an emotional rather than a cognitive nature. . . . Appreciation is an attitude of mind which is passive, contemplative. . . . The individual is satisfied with it. This puts appreciation in the category of recreation. Appreciation then always involves the pleasure tone, otherwise it could not be enjoyed.

Appreciation of social values. The conception of reading as experience emphasizes the importance of stressing the value and needs of human beings, both as individuals and as members of society. From the first grade on, in the reading lessons, we ought not to fail to cultivate social appreciation on "the basis of lofty motives, persistent effort, hardships overcome, and suffering nobly borne." In order to develop this social appreciation, we need to choose reading material for the pupils from the whole human drama, representing a great variety of life situations in all parts of the world. The children need to experience a great deal of this reading, much as we witness a play upon the stage, the reading being done with ease, rapidity, and pleasure.

Appreciation of æsthetic values. In a piece of literature we may appreciate the thought or feeling expressed, the idea, the story, or the act, or we may appreciate the way in which it is told, the fine choice of words, the fluency and ease of style, the delightful musical qualities of the poem. We may differ with Woodrow Wilson in his political ideas, but all agree that he has a remarkable style in his state papers. Poe's purpose was to produce an effect rather than

[1] Strayer and Norsworthy. *How to Teach*, chap. VIII, pp. 126, 127. The Macmillan Company, 1918.

to express a thought. If we have been properly taught, we cannot fail to appreciate the musical characteristics and the skillful choice of words that he uses to produce the particular effect desired. Æsthetic appreciation of good taste, beauty, and the pleasurable effect of form can be more effectively developed through experience than through too much intellectual analysis of the underlying technique. One school reports excellent results from allowing a fifth-grade class to sing Scott's poems.

Appreciation of the humorous. When we reflect upon the kinds of humor that the average individual in life appreciates, the importance of the school in developing appreciation of the right sort of humor and wit is clear. The reading instruction provides the best opportunity for utilizing and directing the child's natural liking for the humorous. An interest in reading may sometimes be aroused through this element in literature when all other means fail. Every term's work in reading should contain one or more selections in which the essential element is the humorous. Such a unit generally will be best appreciated by the pupils merely by their being allowed to enjoy it. Problems may be set, the discussion of which will involve the humor of the selection. For an example of this kind see the lesson in Chapter VII on " How I Killed a Bear." The great danger is that teachers will impose needless tasks upon the pupils, which will hinder enjoyment. The oral reading of selected portions will bring out humor under a community of attention which individuals missed in their independent reading. At other times a rapid silent reading in the recitation-lesson will best cause the class to catch the spirit of the humor. It is most important that the teacher realize that the essential element of the selection is the humor, and plan the reading procedure so as to center attention upon that. Miscellaneous audience reading, as described in Chapter V,

furnishes an excellent opportunity for the teacher to guide the pupils in selecting commendable jokes and witticisms.

Appreciation of nature. There is always danger of carrying correlation to absurd lengths. However, much may be done in the reading lessons to arouse an interest in the beauties of nature and in the enjoyable observation of nature phenomena, as well as to develop appreciation of the literature of nature. This may best be done by developing a feeling for the spirit that animates the author, rather than by centering attention upon information. Here again the teacher's purpose must concentrate upon the large values of the reading matter. The material used must be full of the spirit of a lover of Nature in close communion with her many-sidedness and her changing moods, and at the same time be written in a style that appeals to the child as a child rather than as an adult. Wherever the material reveals the music of Nature, it should be read orally.

General method for the appreciation lesson. The method for the appreciation lesson can hardly be reduced to a formula. In general, there are three phases that are fairly constant: (*a*) an initial large view; (*b*) analysis into essential elements; (*c*) a final perspective view of the whole. Applying this to a reading lesson, it will mean that the selection will be read through from the beginning to the end, without interruption, to get the general theme or spirit of the unit. In some cases this should be done by the pupils during study time, and in some cases the selection should be read orally to the class by the teacher. The second step involves a consideration of the unit more in detail, with a problem or problems as the basis of analysis and reclassification. During this step any obstacles to a clear comprehension of the meaning of the material or appreciation of its spirit are cleared away. Finally, there is a perspective view of the unit as a whole. This may simply be a final

reading of the poem to the class by the teacher, or by some good pupil reader. It may be a final consideration of the essential point of view, value, beauty, or ideal portrayed in the selection, or it may be a recapitulation of experience through dramatization.

General suggestions as to developing appreciation. The following suggestions as to methods and plans may prove helpful to teachers:

1. While an adequate knowledge is helpful toward appreciation, over-analysis is fatal to emotional enjoyment. It is not necessary to know the meaning of every word in order to appreciate a piece of literature. It is better to determine the essential points and let the rest pass.
2. "The best preparation for the teacher who feels that her teaching is inadequate in those phases of her work which involve appreciation is to plan to do what she can to ensure her own growth in this particular. Read more poetry, and especially read it with those who derive great pleasure therefrom, if you wish to teach poetry better." [1] The spirit of the emotional attitude must be caught rather than taught.
3. In so far as there is attention to the technique of literary types and structures it should be clearly only a means to a better understanding and appreciation of the major content values. For the average person, "literature is a thing to be experienced, not to be studied; to be used, not to be analyzed; to be pleasurable experience motivated from within, and not tasks arbitrarily imposed from without."
4. A particular unit of reading matter should be read at a rate similar to the rate that would be used in a typical

[1] Strayer, George D. *A Brief Course in the Teaching Process*, chap. VII. Macmillan, 1911.

life situation. We read a book of fiction or a drama at one sitting or within a few days. This gives a better perspective view than is possible under the laboriously slow reading typical of the school. The average person's reading is largely for recreation. Qualities characteristic of recreation should predominate in the appreciation reading lesson.

5. It is necessary that teachers have clearly in mind wherein lies the essential value of the unit. For the Mother-Goose rhymes and poetry suited to the primary grades it is in the beauty of sound and form. They are therefore suited for auditory experience and memorization. The story makes its appeal through the content, and its ordered arrangement in plot and narrative. Consequently it may be experienced through being heard or through silent reading, and reëxperienced through telling. The value of Warner's "How I Killed a Bear" is in the humor. The value of "Horatius at the Bridge" lies in the heroic act told in a forceful manner. In the "Gettysburg Address" Lincoln's simple but forceful appeal to the living to complete the unfinished task of saving the Union has made it a classic. It is useless for a teacher to attempt to impart appreciation until she has determined definitely the essential worth of the unit.

Cautions.

1. Avoid raising the critical attitude for the time.
2. Do not expect rapid growth in appreciation.
3. Do not attempt to develop appreciation for a unit of literature which you do not genuinely appreciate yourself.
4. Do not force children to give expression to the feeling awakened.

2. The Teaching of Poetry

A lesson on a poem is classified as an appreciation lesson. Applying the general method of this type of lesson to the poem, we have three main steps.

A perspective view of the whole. It is important that the first impression be pleasurable and vivid. It may be necessary to pave the way for the most effective attitude of mind by a preparatory step. This may be done in either of several ways:

1. By getting before the pupils the setting, through questions and discussion.
2. By relating an incident or information essential to the understanding of the poem.
3. By setting a problem to serve as a specific purpose for securing a high degree of attention.
4. By exhibiting a picture or other concrete illustration of the poem.

This preparatory step should be brief and to the point. In the first five or six grades, and sometimes even above this, the pupil's first impression of the poem should be from the teacher's reading to the pupils, without the text before them. There are two reasons for this. The literary values of the poem are essentially auditory. Poetry is a more difficult form of reading than prose. In the upper grades the perspective view may be a rapid silent reading of the whole during study-time, especially with the longer units, such as *Miles Standish*. Not until the sixth or seventh grade is it advisable, as a rule, to have the pupils study the poem preparatory to the recitation.

Excellent preparatory discussions for poems for each grade may be found in *The Teaching of Poetry in the Grades*, by Halliburton and Smith. Excellent accounts preparatory to the presentation of poems for the four upper grades are

given in the series of Readers entitled, *Studies in Reading*, by Searson and Martin. Good brief preparatory paragraphs and problems are given preceding the poems in *The Boys' and Girls' Readers*, by Bolenius. Valuable illustrations are given in the newer sets of readers. Those in the *Riverside Readers* and the *Natural Method Readers* are very good. The illustrations in the Jessie Willcox Smith edition of the *Mother Goose Rhymes* are excellent for mounting or framing. Some primary teachers use these by placing one at a time above the blackboard as the rhymes are taught, and using them as helps in recalling the rhymes.

Study by parts. In studying the poem by parts it is often best to consider it in terms of thought units. In the "Daisies," by Frank Dempster Sherman, each pair of lines constitutes a thought unit. In "Where the Boats Go," by Stevenson, each stanza answers a question, as follows:

Stanza 1, How does the river look?
Stanza 2, What is floating on the river?
Stanza 3, Where is the river going?
Stanza 4, What will happen a hundred miles away?

In some cases the analysis of the poem may be made in terms of a problem. The following are some good problems.

"A Valentine," by Laura Elizabeth Richards.
Draw and color a little valentine that would suit this poem.

"Somebody's Mother."
Tell the class how you would arrange the poem as a moving picture.

"A Riddle," by Hannah More.
After you have guessed this riddle, take each line separately and show that it is true.

"The Bells," by Edgar Allan Poe.
List the four kinds of bells, and list under each four words well chosen to express the effect characteristic of the bell.

"The Pied Piper of Hamelin," by Robert Browning.
In preparation for dramatizing, decide upon how many scenes will be needed and the stage-setting for each.
"Hervé Riel," by Robert Browning.
For effective oral reading of the first stanza we should express sympathy and terror. What should be expressed in reading each of the other stanzas?
"The Children's Hour," by Longfellow.
In the picture in the Reader be able to identify each child.

During this analysis step any parts or words, the meaning of which is not clear, would be explained. In some cases it will be advisable to have the pupils consult the dictionary, or the glossary in the reading text. But Chubb's caution in this respect is needed:

> Beware of the dictionary: let it be a last resort. Use it as little as possible; there is no magical virtue in it. Encourage the habit of getting at the meaning of a word through the context, which is far more important than a habit of facile dictionary hunting. Few words have fixed values anyhow; they take complexion from the company they are in. [1]

The treatment of the poem by parts may be done in a variety of ways. A part may be read silently by the pupils, interpreted, details cleared up, related to the whole, and then read orally by some pupil. Or the oral reading may be deferred until the poem has been considered in detail, and then the whole read aloud. In other cases it may be best for the teacher to read the stanza or other division orally, as the pupils read it silently, and have the pupil's oral reading following the detailed analysis. It is appropriate here again to caution against over-analysis. Be sure that the essentials get into the foreground of the child's consciousness as the principal values to control in studying a poem.

[1] Chubb, Percival. *The Teaching of English*, p. 169. The Macmillan Company, 1902.

A new experience of the whole. The final step in an appreciation lesson should be one of synthesis. The first step was a rapid survey of the whole. The second step was an analysis of the details in relation to major values. The last step is the opposite of analysis. Too often the last step is omitted altogether. Other times it is a dreary review without an element of newness. This third step, then, should be synthetical and experiential, and should contain sufficient new procedure and content to be impressive. In some cases it might be a final oral reading or singing of the whole. In another case it might be the dramatization of the poem on the basis of the analysis made in the second step. In other cases it might be the statement of the solution of the problem. It might consist in memorizing and reciting the poem. The summarizing of the essential values of the poem under a new organization might constitute the final step. The important thing is for the teacher to determine the final step according to the nature of the particular poem.

It is not possible in this treatment to give detailed illustrations of model lessons. Excellent ones for each grade may be found in *The Teaching of Poetry*, by Halliburton and Smith. Excellent lists of poems by grades are given there also.

3. Memorization

Method in a memorization lesson. Probably the most common method used in helping a class or pupil to memorize a poem is to have one line or stanza repeated several times and then recited, then to have the next line or stanza repeated and recited, and so on through the poem. This is an inefficient method, not in accord with the psychology of memory or with the findings of experimental teaching. We are all familiar with the experience of the boy who comes to

the end of a stanza in recitation and can go no farther. This is because the connection between parts has been very poorly made in the method used in memorizing.

Close association of meanings. All writers emphasize the importance of closely associating in the pupil's mind the ideas of matter to be memorized. Memorizing a poem should be a very thoughtful procedure. Conscious memorizing naturally follows the thinking process. The first impression affects materially the pupil's interest in the poem, and his effort in remembering it *verbatim.* The vividness of the first experience may be heightened through the preparatory step discussed under the teaching of a poem. The pupil's first contact with a poem should be under a high degree of attention and a feeling of pleasure. It is best to present the poem in terms of the principal thought units. The details under each of the major ideas should be developed in the order in the poem. Tying the larger thoughts together helps the pupil to comprehend and appreciate the poem as a whole, and aids recall. The meaning elements need to be referred to when an attempt to recall is failing. The commonly used method described in the preceding paragraph fails to utilize association of meanings as an aid in memorizing.

The method of the whole superior to the method by parts. The poor method of memorizing line by line, or stanza by stanza, is a method by parts. All experimenters have reported better results from the method of the whole. In the latter, the pupils' efforts at *verbatim* recall will be attempts to recall the poem from the beginning to the end, rather than to work on a part until it is memorized and then attack the next part. Parker points out [1] two reasons why the method of the whole is more economical than the method by parts:

[1] Parker, S. C. *Methods of Teaching in High Schools,* pp. 154–58. Ginn and Company.

1. No time wasted by useless associations by the whole method.
2. Greater concentration of attention by the whole method.

Combining the two methods. Strayer and Norsworthy suggest[1] a combination of the part method and the whole method:

> The advantages of the whole method are that it forms the right connections and emphasizes the complete thought, and therefore saves time and gives the right perspective. Its difficulties are that the material is not all of equal difficulty, and therefore it is wasteful to put the same amount of time on all parts; it is discouraging to the learner, as no part may be raised above the threshold of recall at the first study period (particularly true if it is rote memory); it is difficult to use recall, if the whole method is adhered to. A combination of the two is therefore wise. The learner should be encouraged to go over the material from beginning to end, until the difficult parts become apparent, then to concentrate on these parts for a time, and again go over from the beginning — using recall whenever possible.

Memorizing Wordsworth's "Daffodils." These authors give in detail how to teach a class of sixth-grade pupils, in fifteen minutes, to memorize the "Daffodils." The following is the outline of their plan.

1. Preparatory arousal of interest in the poem.
2. Presentation of poem by parts, in terms of the big ideas with related details.
3. Oral reading of whole by teacher to pupils, once or more.
4. Pupils recite poem with teacher, repeating each stanza several times.
5. Analysis of thought, indicating, in the author's words as far as possible, the development of ideas through the poem.
6. Recital of poem as a whole by teacher and pupils.
7. Individual study and recall by pupils.
8. *Verbatim* recital by pupils next day.

Recall as a factor in memorizing and retaining. While there should be careful relational thinking and interpretation, followed by a certain amount of *verbatim* repeti-

[1] Strayer and Norsworthy. *How to Teach*, chap. v. The Macmillan Co.

tion, effort at recall should come comparatively early in the memorization process. Repetition prolonged tends to make the recall mechanical, and consequently lacking in concentration upon the thought. After a poem has been memorized, it will be much more likely to be permanently retained if recalled at intervals. If a poem is being memorized to be recited upon a certain day, it is well to recall it each day. After a poem has been memorized by a class, it should be recalled occasionally in that grade and also in the next grade to ensure a more permanent retention. Pupils should be encouraged to recite their " memory gems " and poems to individuals and to special groups, whenever appropriate occasions arise. Teachers should be careful to provide opportunity for pupils to recite poems learned in previous grades. A very good scheme is to have a record paper accompany the class, giving the poems memorized by the class under previous teachers.

What to memorize. An interesting and valuable study has recently been made to determine what poems are most commonly used for memorization and in what grades. The study is based upon the courses of study of fifty cities of varying sizes located in various parts of the country. The following list is taken from the report of the study and consists of the poems most frequently listed in the fifty courses of study and shows the grade in which each poem was most frequently used: [1]

PREFERRED LISTS OF POEMS FOR MEMORY WORK

Grade I

	Author	*Title*
1.	Alexander, Mrs. C. F.	All Things Bright and Beautiful
2.	Brown, Kate L.	Little Plant, The

[1] Bamesberger, Velda C. *Standard Requirements for Memorizing Literary Material.* University of Illinois, Urbana. 50 cents. 1920.

3. From the German	Sleep, Baby, Sleep
4. Stevenson, R. L.	Autumn Fires
5. Stevenson, R. L.	Rain
6. Stevenson, R. L.	Swing, The
7. Taylor, Jane	Twinkle, Twinkle, Little Star
8. Tennyson, Lord	Bird and the Baby, The
9. Cooper, Geo.	Come Little Leaves
10. Field, Eugene	Why Do Bells for Christmas Ring?
11. Rossetti, Christina	Wind, The
12. Stevenson, R. L.	My Shadow

Grade II

Author	*Title*
1. Allingham, Wm.	Fairies, The
2. Cary, Phœbe	Suppose
3. Child, Lydia M.	Thanksgiving Day
4. Coleridge, S. T.	Answer to a Child's Question
5. Field, Eugene	Dutch Lullaby
6. Field, Eugene	Rockabye Lady, The
7. Houghton, Lord	Lady Moon
8. Ingelow, Jean	Seven Times One
9. Kingsley, Chas.	Lost Doll, The
10. Larcom, Lucy	Brown Thrush, The
11. Lear, Edward	Owl and the Pussy Cat, The
12. Sherman, F. D.	Daisies
13. Sherman, F. D.	Four Winds, The
14. Stevenson, R. L.	Land of Story Books, The
15. Field, Eugene	Duel, The
16. Longfellow, H. W.	Hiawatha's Childhood
17. Miller, Emily	Blue Bird, The
18. Stevenson, R. L.	Wind, The
19. Stevenson, R. L.	Windy Nights

Grade III

Author	*Title*
1. Aldrich, T. B.	Marjorie's Almanac
2. Allingham, Wm.	Wishing
3. Björnson, Björnstjerne	Tree, The
4. Brooks, Phillips	O Little Town of Bethlehem

5.	Cary, Alice	November
6.	Field, Eugene	Norse Lullaby
7.	Hogg, James	Boy's Song
8.	Krout, Mary H.	Little Brown Hands
9.	Longfellow, H. W.	Hiawatha's Sailing
10.	Moore, C. C.	Visit from St. Nicholas, A
11.	Tennyson, Lord	Owl, The
12.	Jackson, Helen H.	September
13.	Longfellow, H. W.	Children's Hour, The
14.	Rands, W. B.	Great, Wide, Beautiful, Wonderful World

Grade IV

	Author	*Title*
1.	Field, Eugene	Night Wind, The
2.	Gould, Hannah F.	Frost, The
3.	Jackson, Helen H.	October's Bright Blue Weather
4.	Longfellow, H. W.	Village Blacksmith, The
5.	Lowell, J. R.	Fountain, The
6.	Tate, Nahum	Christmas
7.	Tennyson, Lord	Brook, The
8.	Thaxter, Celia	Sandpiper, The
9.	Wordsworth, Wm.	Lucy Gray
10.	Bryant, W. C.	Robert of Lincoln
11.	Longfellow, H. W.	Arrow and the Song, The
12.	Lowell, J. R.	First Snowfall, The
13.	Riley, J. W.	Brook Song, The

Grade V

	Author	*Title*
1.	Bryant, W. C.	Gladness of Nature, The
2.	Bryant, W. C.	Planting of the Apple Tree, The
3.	Carlyle, Thomas	Today
4.	Hemans, Felicia	Landing of the Pilgrims, The
5.	Jackson, Helen H.	Down to Sleep
6.	Longfellow, H. W.	Excelsior
7.	Longfellow, H. W.	Paul Revere's Ride
8.	Longfellow, H. W.	Day is Done, The
9.	Longfellow, H. W.	Old Clock on the Stairs, The
10.	Morris, G. P.	Woodman, Spare that Tree

11.	Shakespeare, Wm.	Under the Greenwood Tree
12.	Whittier, J. G.	In School Days
13.	Whittier, J. G.	Barefoot Boy, The
14.	Whittier, J. G.	Corn Song, The
15.	Emerson, R. W.	Fable
16.	Whittier, J. G.	Barbara Frietchie

Grade VI

	Author	*Title*
1.	Aldrich, T. B.	Before the Rain
2.	Cary, Alice	Nobility
3.	Drake, J. R.	American Flag, The
4.	Holmes, O. W.	Old Ironsides
5.	Hunt, Leigh	Abou Ben Adhem
6.	Longfellow, H. W.	Builders, The
7.	Tennyson, Lord	Charge of the Light Brigade
8.	Wolfe, Chas.	Burial of Sir John Moore
9.	Wordsworth, Wm.	I Wandered Lonely as a Cloud
10.	Longfellow, H. W.	Psalm of Life, A
11.	Tennyson, Lord	Break, Break, Break
12.	Tennyson, Lord	Bugle Song

Grade VII

	Author	*Title*
1.	Bryant, W. C.	To a Waterfowl
2.	Emerson, R. W.	Snowstorm, The
3.	Holland, J. G.	Gradation
4.	Miller, Joaquin	Columbus
5.	Browning, R.	Home Thoughts from Abroad
6.	Longfellow, H. W.	Building of the Ship, The
7.	Lowell, J. R.	Fatherland, The
8.	Lowell, J. R.	Yussouf
9.	Macaulay, T. B.	Horatius
10.	Taylor, Bayard	Song of the Camp, The
11.	Tennyson, Lord	Sir Galahad

Grade VIII

	Author	*Title*
1.	Bryant, W. C.	Thanatopsis
2.	Holmes, O. W.	Last Leaf, The

3.	Kipling, Rudyard	Recessional
4.	Pierpont, John	Warren's Address
5.	Shakespeare, Wm.	Mercy Speech
6.	Shelley, P. B.	Cloud, The
7.	Sill, E. R.	Opportunity
8.	Whitman, Walt	O Captain! My Captain!
9.	Whittier, J. G.	Snowbound
10.	Burns, Robert	For A' That and A' That
11.	Gray, Thomas	Elegy Written in a Country Churchyard
12.	Holmes, O. W.	Chambered Nautilus, The
13.	Lowell, J. R.	Day in June, A.
14.	Scott, Sir W.	Breathes there a Man
15.	Shakespeare, Wm.	Polonius to Laertes

Caution in selecting poems. While the results of studies like the one just referred to are very helpful in determining what material to use, care should be taken to make sure that poems chosen from lists of this kind are fitted in their thought and feeling values to the level of development of the pupils. For instance, in the preceding list, Whittier's "Barefoot Boy" is given as one of the poems most frequently memorized in the fifth grade. But an analysis of the poem will show that it was written for adults with an adult appreciation of the barefoot boy, and not for children. This is not an appropriate poem to use in the grades. In the lower grades, poems more difficult than the pupils can be expected to learn to read may be used for memory work provided they are psychologically suited to the children.

The number of poems required to be memorized. In the study referred to in the preceding pages, it was found that the most common requirement as to the number of poems to be memorized was six in each grade. The median number required was seven in the first four grades and eight in each of the four upper grades.

PROBLEMS FOR STUDY AND DISCUSSION

1. Of the five reasons given as to why our schools have so often failed to develop appreciation, which do you consider the most important?
2. Select a unit of reading matter, the essential element of which is (*a*) the social value, (*b*) the æsthetic value, (*c*) the humor, (*d*) the nature element.
3. What is the essential difference between knowing and appreciating?
4. What danger is there in reducing the appreciation lesson to formal steps?
5. Do you agree with the fourth general suggestion for developing appreciation? Is this generally done in school practice? Give illustrations.
6. Select a poem to be taught. Determine its essential value. Give briefly your plan of procedure in teaching the poem.
7. Select another poem and formulate a good problem or specific aim for the pupils to keep in mind in their experience with the poem.
8. Select a poem suitable for dramatization.
9. What are the two most important points in the methodology of memorizing a poem?
10. Using some familiar poem, illustrate the difference between the method of the part and the method of the whole. Show how the two might be combined in memorizing the poem.

CHAPTER VI

SECURING THE AUDIENCE SITUATION IN ORAL READING

Types of oral reading. There are two general types of oral-reading recitation procedure. The most common one is that in which all the pupils of the class have before them the same material. This type is well adapted to primary work. It is also well adapted to the intensive study of a distinctly literary unit, especially the poem, the oration, and the short unit of poetic prose. Literary values are primarily auditory. The race had a considerable literature before it had printing. The literature was transmitted orally from generation to generation. Rhyme, rhythm, and other literary values are essentially and distinctly auditory. When we make an intensive study of a poem, the best method is for each pupil to have a copy of the poem and to use the oral-reading procedure as the guide of the recitation. Excellent illustrations of model lessons may be found in *Teaching Poetry in the Grades*, by Halliburton and Smith.

The second type of oral-reading method is that of audience reading. In the first type of oral reading there is no conscious purpose of conveying thought to an audience. It may be used as a test of the pupil's ability to express the thought, but the other pupils and the teacher have the reading matter before them, and any attempt to have the pupil try to imagine that he is reading to an audience under those conditions is futile. That type of oral reading is very useful for certain purposes, but if only that kind is used the pupils do not develop the proper facility in reading to an audience. Audience reading is the principal use made of oral reading outside of the school. It is the purpose of this

chapter to give a number of plans for securing real audience situations.

Types of Audience Reading

Miscellaneous audience reading. One plan that it is possible for practically all teachers to use is the miscellaneous audience reading. Have each pupil bring in a short unit to read to the class. It may be a clipping, a selection from a library book, a birthday book, a Christmas book, a Sunday-School paper, a child's periodical, or a letter received. Riddles and jokes may be used, but they should not monopolize the time at the expense of more valuable material. The teacher should read to the pupils from time to time samples of good, short units, suitable for this type of reading in her grade. It will be necessary to stimulate and encourage the uninterested, discouraged, or unresourceful pupils. It is better to provide such a pupil with a book or periodical from which he may choose a selection than merely to provide him with the selection. Each pupil should make his selection, and practice at home.

The reader should be expected to put the thought across to the audience — the remainder of the class. The pupils naturally have a tendency to study their own selections while one pupil is reading orally. In such case the teacher should expect them to give full attention to the reader as a matter of politeness. A failure on the part of the pupil to put the thought across to the audience will be the teacher's opportunity to instruct through both example and precept. This type of recitation procedure should not be a mere entertainment program. It should be a time of serious effort and thoughtful instruction, as well as a period of interest and enjoyment. The interest of the audience will be increased through such problems as the following:

When the reader has finished, be ready to give the most interesting point.
Be ready to name the characters, the chief character, the highest point of interest.
Be ready toward the end of the recitation to tell whose selection you liked best and why.
What do you think will happen next in the story?

The discussion should be brief, just enough to stimulate the interest of the class.

Oftentimes pupils living near each other will desire to divide a story which is too long for one to read. It is best to have as many different pupils as possible read during one recitation. Each reading must be short. After the teacher and pupils have had some experience with this type of reading, it will be found that about fifteen pupils can read in a thirty-minute period. Interest is stimulated by having a definite time, such as a certain day each week, or every other week, for this type of oral reading. A miscellaneous collection of Primers is the best material to use for this type of reading in the upper first grade. First Readers, with short units, may be used to good advantage in the second grade.

In this type of audience reading, where each pupil chooses different material from each other pupil, there is an opportunity to develop judgment on the part of the pupils in selecting reading material, and the school and the home are in consequence brought into closer relationship. It is more easily carried out in a community where the homes are supplied with reading material for the children, but it may also be a means of stimulating a desire for securing more reading material for the children in homes less fortunate. The writer has seen this plan carried out in a number of classrooms to excellent advantage.

Group-to-group audience reading. The second type of

audience-reading recitation is as follows: Each class is given a different set of books containing short, easy selections of the narrative type, such as the *Fifty Famous Stories*. Each class is assigned a unit for preparation at home, including practice in reading orally. In the recitation procedure the first class reads its selection to the second class, which has not had opportunity to read the selection, and consequently constitutes a real audience. The pupils of the first class have each a copy of the selection before them and have the advantage of hearing it read and of reading it silently at the same time. The discussion is carried on mainly by the audience group, the reading group coming into the discussion occasionally. The teacher sets problems to provide a specific purpose for the careful attention of the listening group, and as the reading proceeds enough questioning and discussion take place to keep both groups alert and attentive. After the first class has completed reading its story to the second class, the second class reads its story to the first. Ordinarily there is opportunity for both classes to read in a thirty-minute period if the recitation proceeds with the snap and vigor characteristic of a well-planned and well-executed lesson.

Another type of group-to-group audience reading with the whole room of pupils is that followed by one school, and involves the use of a small number of copies of one book. This school was furnished with ten copies of *Peter and Polly in Spring*. This is a very interesting narrative nature book, consisting of units of about three pages, each practically independent of the other and suitable for second or third grades. There being only ten copies of the book, it was impossible to use it in the usual way of having each pupil in the class have a book. The primary purpose of the book is to lead to an observation and appreciation of nature. In many cases the sounds were important characteristics.

For these reasons it seemed that the material should come before the pupils in an oral fashion. The type of the material being narrative, and the book being divided into comparatively short units, it appeared that the book would be suitable for audience reading. The content of the material is such that, to realize the best experience for the children, it was felt advisable to cover the material as quickly as possible immediately preceding the opening-up of the season represented, so that the stimulus of the interest created would more likely result in enjoyable observation on the part of the pupils.

In group-to-group audience reading it is usually best for the teacher to have a book. This left nine books for the pupils. It was decided to cover three units a day. This would take about two weeks, or a little more, to complete the book. One unit was assigned to each of three groups of three pupils for a reading period of each day. During a study period these pupils were permitted to leave the room and go to some vacant room, or to some appropriate place in the corridors, and practice reading so that they could read to the best advantage to the whole room of pupils. One of the better readers was placed in charge of the group of three. They gave such help to each other as they could in this preliminary preparation. It is evident that this sort of group coöperation provides a type of experience that is very valuable in training for citizenship in a democracy.

Conducting the group-to-group recitation. In conducting the recitation, the teacher had the group of three stand in the center of the room in front and as near to the pupils as possible. In order to get the rather large listening group seated more compactly, and thereby make it easier for both the audience and the reader, the teacher had the pupils toward the rear of the room move forward, and if necessary

sit with other pupils. The reading group was permitted to place a drawing or any other material on the blackboard, preceding the recitation, as a means of making clearer to the audience the content of the unit. As the reading proceeded, the teacher played an important part in guiding the recitation. If a tendency on the part of the audience to become inattentive showed itself, the teacher aroused interest by a question, testing some pupil upon his understanding of what had been read or providing a specific purpose for listening to what was coming. At certain times the listeners were permitted to ask the readers questions about matters which were not entirely clear. After this group of three had finished, the next group of three took their places and read.

By this plan the class was able to cover from eight to twelve pages in an ordinary period of twenty-five or thirty minutes, assignments for the next period included. Every pupil in the room had opportunity to have a copy of the book and participate in the audience reading at least twice during the time the class was using the book. After the book had been covered in this way, any pupil who desired to read the book or any part of it more carefully was permitted to do so for spare-time silent reading. The writer observed this work several different days, and was impressed with the interest and spirit manifested by the class. The other books of the series, *Peter and Polly in Summer*, *In Winter*, and *In Autumn*, were used in the same manner at the appropriate times of the year. In the sixth, seventh, and eighth grades the same plan was followed, using Dallas Lore Sharp's Series — *The Spring of the Year*, *Summer*, *The Fall of the Year*, *Winter*.

Most schools are organized on the "two classes to the room" plan. As a general rule, it is not advisable to conduct reading work with the room as a whole. It is possible to use the group-to-group audience-reading plan with one

class. Divide the class into two groups and provide each group with a different set of books. In selecting the two books for this, it is best to have books containing independent short units of the narrative type. It is also best to use books that have not been used in the customary reading lessons. The teacher should have a copy of each of the two books in order to guide the recitation as may seem necessary. The pupils prepare during their study period. If possible it is advisable to have each group, under the control of a leader, go to some suitable place and assign the parts to the different members of the group, and practice reading aloud. In some instances it will be well for pupils to take the books home, and practice reading the story to some one at home. The suggestions made throughout this section with reference to the teacher's part in the management of the recitation apply, of course, here. In this type of work it is best to have the reading group separated from the audience group. In order to do this it is best to have the reading group stand in front or to one side of the room, and the audience group seated compactly. This plan makes it easy to take care of individual differences, by grouping according to ability and by providing easier material for the lower group.

Suitable books to use for such reading. The following is a list of books suitable for the group-to-group audience reading:

BOOKS SUITABLE FOR GROUP-TO-GROUP AUDIENCE READING

Title	*Grades*	*Publishers*
Folk-Stories and Proverbs	1–2	Ginn & Co.
The Story Hour Reader, Book One	1–2	American Book Co.
Animal Fables	2–3	American Book Co.
Fairy Stories and Fables	2–3	American Book Co.
Peter and Polly Nature Series, 4 books	2–3	American Book Co.
Merry Animal Fables	3–4	Little, Brown & Co.

Legends of the Red Children	3–4	American Book Co.
Chinese Fables and Folk-Stories	3–4	American Book Co.
Stories of Humble Friends	3–4	American Book Co.
Fifty Famous Stories	3–4	American Book Co.
Æsop's Fables (Stickney)	3–4	Ginn & Co.
Short Stories (Turner)	3–4	Ginn & Co.
Nature's Wonder Lore	3–5	Rand McNally & Co.
Going to School in Animal Land	3–4	A. Flanagan Co.
The Pig Brother	4–5	Little, Brown & Co.
Japanese Folk-Stories and Fairy-Tales	4–5	American Book Co.
Stories of Heroic Deeds	4–5	American Book Co.
Quaint Old Stories	4–5	Ginn & Co.
Lives and Stories Worth Remembering	4–5	American Book Co.
True Bird Stories	4–5	Houghton Mifflin Co.
Wilderness Babies	5–7	Little, Brown & Co.
Beyond the Pasture Bars (Sharp)	5–7	The Century Co.
Stories from Life	5–6	American Book Co.
Indian Folk-Tales	5–6	American Book Co.
Boy and Girl Heroes	5–6	The Macmillan Co.
Indian Legends	5–6	The Macmillan Co.
Myths of the Red Children	5–7	Ginn & Co.
Bird-Life Stories	6–8	Rand McNally & Co.
The Sharp Nature Series (One book for each season)	6–8	Houghton Mifflin Co.
Stories of English History	6–7	Ginn & Co.

Dramatic reading. The third type of audience reading is that involving the use of selections in dramatic form. This is feasible for sight-reading work. Only as many pupils should be given books as there are characters in the drama. The other pupils of the class form the audience.

The following recitation, conducted by Miss Annette Buehrmann with a fourth-grade class, illustrates this type of recitation. The material used was two selections from Stevenson's *Children's Classics in Dramatic Form*, Book II — Pocahontas and Captain Smith, seven pages, and Pocahontas Saves Jamestown, eight pages. The characters were assigned to the pupils who were to take part in the reading. The remainder of the class constituted the audience and did not have books. The teacher read the time,

place, etc., getting before the class clearly the setting of the scene. As the reading proceeded, an occasional question or suggestion was thrown out to arouse the attention of the audience group. After the first drama was read, the characters in the second drama were assigned to pupils who had not read, and the remainder of the class became the audience group. The class was a comparatively slow class, but the plan provided such excellent motive, and was so well carried out by the teacher, that the reading was a pleasure to both the readers and the listeners. The improvement of the pupils through such procedure was clearly evident to the writer, who had followed the progress of these pupils with special attention. The two short dramas, fifteen pages, were read in a thirty-minute recitation period, and every pupil in the class had taken part in the reading.

Topical audience reading. A fourth type of audience reading involves the use of selections from one author or upon one topic. The following recitation, conducted by Miss Lucille Murphy, a seventh-grade teacher, illustrates this type. The class had been making a study of Longfellow, and had completed the *Courtship of Miles Standish* and one of his shorter poems. The teacher secured a number of fifth-, sixth-, seventh-, and eighth-grade readers containing short selections from Longfellow. Each pupil selected a different poem, and prepared upon it during study-time in school and practiced reading it orally to the folks at home. During a thirty-minute recitation, eight poems were read, including such ones as " The Old Clock on the Stairs " and " The Arrow and the Song." The teacher kept the interest of the audience aroused by setting a problem for discussion in connection with each poem. The discussion was, of course, necessarily brief, just enough to stimulate thinking on the part of the audience. The reading was surprisingly well done. There was no attempt to

go into an intensive consideration of each poem. The purpose was to give the pupils a more extensive experience with Longfellow's poems than would be possible if all the lessons in relation to Longfellow had been of the intensive type.

In a similar way the audience reading may be carried out by having the pupils read selections upon some theme of interest, such as Washington's Birthday, Arbor Day, Gardening, Safety First, Current Events, Thanksgiving, Baseball News, Signs of Spring, Letters Received, Letters Written, and themes of an ethical nature involving the reading of stories illustrating patriotism, perseverance, honesty, etc.

The "cut-up story." The fifth type of audience reading involves the use of a "cut-up story." The teacher selects a printed story, suitable for her class. The story is cut into about as many units as there are pupils in her class. The units are mounted upon uniform-sized cardboard for convenience in handling. In selecting the story, the teacher should see that the printing is up to the hygienic requirements of her grade in size of type, leading, and boldness. Each pupil is given one of these units, which are numbered consecutively in the order of the story. The work may be sight-reading, or the pupils may be given opportunity to prepare for the reading. As each pupil reads his part of the story, the other pupils should give close attention as a matter of politeness. The teacher will need to make sure, through questions and pupil-reproductions, that all members of the class are getting the story as it is being read.

Illustrated audience reading. A sixth type of audience reading is in connection with illustrative drawings which pupils have previously made during drawing or reading study-time, in correlation with the silent-reading recitations.

An eighth-grade class, in preparation for a silent-reading recitation, had studied *Rip Van Winkle* to get the story as a whole and to select paragraphs that would be good for illustration. During the recitation a certain number of paragraphs were selected by the class for illustration, and one of these assigned to each pupil. During the following study period each pupil made an illustrative drawing in crayola to represent the picture in his paragraph, in harmony with the general spirit and setting of the whole story. The one making a particular drawing read his paragraph to the class, while another pupil held the drawing in good light before the class. The problem to be solved by all was: Is the drawing a good representation of the word pictures in the paragraph, and in accordance with the general spirit and setting of the story? The reader, being before the class with the book, had every opportunity to justify his illustration by reading to the class. The other pupils were not permitted to look at their books. They were expected to depend upon the reader and upon their knowledge of the selection gained in preceding study.

Some very interesting things were revealed. Some pupils had made very good illustrations, showing that they had caught the spirit and setting of the story as well as the detail of the particular paragraph. Others showed, much more quickly and completely than could have been revealed by any other form of expression, their lack of insight into Rip's character and their failure to comprehend the details of the reading matter. For instance, one boy had a picture of Rip fixing his fence. Another boy, who had caught the spirit, soon brought him to task and he was unable to justify it from any statement in the book. In relation to the oral reading the point is that here was present a real audience-and-reader situation.

Audience reading may be illustrated by the use of the

stereopticon lantern. Lanterns may now be secured which can be used without darkening the room. Recently the writer observed an interesting lesson of this type with an eighth-grade class on *Evangeline.* Each pupil had been assigned a lantern slide. His problem during the study period was to find in the poem the lines that described his picture, and to be prepared to read this description to the class as the picture was thrown upon the screen. The lesson proceeded with a minimum need of effort on the part of the teacher. There was a delightful interest throughout. Several times pupils spontaneously asked questions. The picture aided the audience pupils to follow the oral reading. A few pupils read sentences not relevant to the description of the picture, and were promptly criticized by the other pupils.

Wherever possible mounted pictures of good size, illustrative objects, or blackboard illustrations should be used to aid the audience in following the oral reading.

Reading to the pupils. The following material, descriptive of the advantages and the importance of placing examples of good reading before the children, is taken from the St. Louis *Course of Study in Reading:*

> Throughout the reading every variation in the mode of handling the material that can be profitably employed should be introduced. There should be, for example, a great deal of reading to the class by the teacher, as well because it is always a pleasure to hear good reading, as that imitation is a legitimate method to use to vitalize and stimulate immaturity of any sort. Freed from the mechanical labor of doing the reading, the children may have the fullest opportunity to appreciate the content read to them, and so realize the possibilities of the printed page and the satisfactions that it may disclose.
>
> *Grades I and II.* Reading stories and poems to children strengthens in them the love of story and makes them eager to satisfy this desire. Thus, a motive for mastering symbols is provided, a standard of reading is set up, and a model of correct speech is pre-

sented. Not only should the teacher do this reading, but at times excellent readers from their own number should be chosen, or good readers from the second or third grade should be invited to do it.

Grades III and IV. Reading to the children should be done in this grade as in all other grades. The aim should be definite and the response sympathetic. This exercise affords opportunity for the children to hear good pronunciation, good inflection, and good rendering of a masterpiece. The strong readers in the room should be used to assist in this work.

Grades V and VI. Reading to the class by the teacher should be done frequently to stimulate dynamic oral reading, to establish a continuity of thought and feeling, and to secure a fuller comprehension and appreciation of literature through the interpretative power of a good reading voice.

PROBLEMS FOR STUDY AND DISCUSSION

1. Teachers sometimes attempt to secure an audience situation for oral reading by asking the pupils to close their books during the oral reading of a paragraph or section, following the class discussion of it. Criticize this plan.
2. Which of the types of audience reading interests you most? Why?
3. Give an illustration of one or more reading books suitable for group-to-group audience reading, in addition to those listed on page 106.
4. In purchasing a dramatic reader, how many copies would you advise being bought?
5. Choose a unit suitable for "cut-up-story" audience reading in a certain grade.
6. Choose a selection suitable for illustrative drawing and audience reading.
7. Choose a selection suitable for a lantern-slide audience reading lesson.

CHAPTER VII

CONTENT SILENT-READING LESSONS

1. Need for Change in Reading-Recitation Procedure

A poor type of reading-lesson procedure. In the *Survey Report of the St. Louis Public Schools*, in the discussion on reading in the middle grades, the following paragraph occurs:[1]

> The following method illustrates the procedure in one of the classes which secured particularly poor results. The lesson was introduced by asking the name of the story. The pupils then read the first paragraph to themselves. The teacher asked the following questions: "What is meant by conquest?" "What is an event?" The paragraph was then read aloud. Three errors were corrected. The pupils then read the second paragraph silently. Several other disconnected questions were asked. The pupils read the second paragraph orally, and were severely criticized by the teacher. This method was followed through the recitation. At no time was there any evidence of interest on the part of the pupils. Nothing was done to stimulate good thinking. The pupils were inattentive and their reading was poorly done. Wherever such methods exist there is need for a thoroughgoing revision of the methods of teaching reading.

While the above description is that of an extreme case, it nevertheless represents a somewhat common manner of procedure. There are three outstanding characteristics in this type. The recitation centers about an *oral* reading as one of the essential factors and outcomes of the recitation. The subject-matter is considered in fragmentary bits, instead of being considered as a whole and in its larger

[1] Gray, William S. "Reading"; *Survey of the St. Louis Public Schools*, p. 150.

units. The consecutive oral reading, paragraph by paragraph, naturally tends to the neglect of the perspective view and to undue emphasis upon detail. Proceeding consecutively by small units destroys the need for thoughtful reading during study-time. The pupil who dawdles during study-time will do about as well in recitation as if he concentrates vigorously upon the thought of the content. This naturally leads to poor reading habits in study.

Persons who have had wide experience in observing reading recitations testify that this type is altogether too common.[1]

Many teachers are almost entirely absorbed in oral reading, and this has led to an undesirable type of reading lesson common in schools. Under this method one pupil after another rises and reads one or two paragraphs, without previous study; and then states, either in his own words or those of the book, the fragment he has read. Incidentally, a few mispronounced words are corrected, a few inflections and emphases are modified, and possibly some paragraphs are re-read. After the selection has been read in this way, the entire story is occasionally reproduced by one or more pupils.

Why beginning teachers fall into such practices. For the last ten years the writer has had opportunity to observe many beginning teachers passing out from one of the best teacher-training schools in the country. Why is it that almost invariably this is the type of reading recitation they conduct, regardless of what grade or content they are handling? The plausible explanation seems to be that this represents the type of reading recitation they were accustomed to as pupils in the grades, and that their preparation, including the apprentice period, had not given them sufficient observation and experience in radically different methods of handling the reading work. Another contribut-

[1] Kendall and Mirick. *How to Teach the Fundamental Subjects*, p. 35. Houghton Mifflin Company, 1915.

ing factor, no doubt, is that this is one of the easiest ways of getting through a reading recitation, in case of lack of opportunity for preliminary preparation or in case of a feeling of insecurity as master of the situation.

The writer is convinced that this scrappy type of recitation will not cease to be common in the intermediate and upper grades until teachers abandon thinking of reading as an oral process, and abandon the oral-reading procedure as the usual type in these grades. The transition from the recitation centering about the oral reading as the main outcome, to the recitation with little or no oral reading, must necessarily be a gradual one. It takes time to work out the technique of doing things in a new way. There is considerable evidence that progressive teachers over the country are breaking away from this old type of reading teaching, and are developing a new technique for handling silent-reading lessons. To aid in making such a change, the new St. Louis *Course of Study in Reading* makes specific provision for silent-reading work in all grades, and contains four pages of "Suggestions for Classroom Conduct of Silent Exercises in Reading." As a result of a recent study of reading in the elementary schools in Indianapolis, Gray reports [1] that "the diagrams for the first four grades show a gradual increase in the percentage of time devoted to silent-reading instruction." Over a hundred teachers in the five upper grades reported that they devote over fifty per cent of the reading time to silent-reading instruction.

Over-emphasis of oral reading. For a long time many leaders in educational thought have been advising more attention to silent reading in the intermediate and upper grades, and less time to oral reading. Suzzallo says:

Over-emphasized, it [oral reading] slows up the rate of reading

[1] Gray, William S. "Reading in the Elementary Schools of Indianapolis"; in *Elementary School Journal* (January, 1919), vol. 19, p. 351.

to the throat-muscles rate and becomes a positive evil. Later there is some place, preferably in the highest grades, for reading aloud for recreation to others, but this is now completely over-emphasized in schools. Its relatively small use in life does not justify present practice in school. Quick silent reading is the most important task beyond the first two years, and should be given primary emphasis.

Briggs and Coffman say: [1]

The open and most inviting field in education to-day seems to be that of silent reading.

Kendall and Mirick say: [2]

If, then, thought-getting is the vital element in reading, those methods must be used that lay most stress on it and that are devised to develop skill in it. Because teachers realize this, they are giving silent reading and study of the selection to be read much more attention than formerly.

Judd says: [3]

The fourth grade is a crucial point at which the methods of training should undergo a radical change to comport with development of independence and breadth of recognition.

Fifth-grade reading would no longer consist of an oral exercise, in which each pupil holds his book and waits for an opportunity to read a sentence in his turn. This class would devote three fifths of its time each week to silent reading under supervision.

2. Oral vs. Silent Reading

What proportion of the reading time in each grade shall be given to silent reading? Of course it is impossible to determine the answer to this question except in a general, advisory way. Conditions will differ, and the teacher, in the

[1] *Reading in Public Schools* (1911 edition), p. 259. Row Peterson Company.

[2] *How to Teach the Fundamental Subjects.* p. 36. Houghton Mifflin Company.

[3] *Reading: Its Nature and Development.*

final analysis, must be the judge. The general tendency among leaders of education, though, is to begin silent-reading work in the first or second grade, with a small proportion of time devoted to it; gradually to increase this amount of time until in the fourth grade; and above the fourth grade to devote over fifty per cent of the reading-recitation time to silent-reading work. The following diagrams show the opinions of certain leaders.

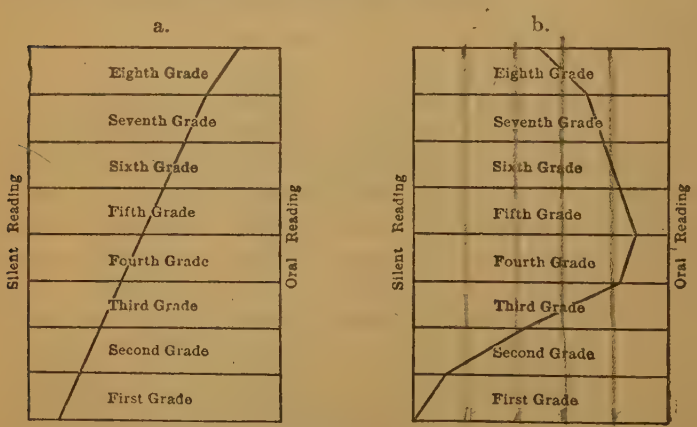


FIG. 12. COMPARISON OF THE AMOUNT OF ORAL AND SILENT READING ADVISABLE IN THE VARIOUS GRADES

a. Reproduced from *How to Teach the Fundamental Subjects*, by Kendall and Mirick.
b. Redrawn from a rough sketch in a letter (March, 1915) by Dr. Henry Suzzallo in answer to a questionnaire.

There are two reasons why the second diagram may be more nearly correct than the first. Studies seem to show that the middle grades constitute the most important growth period in silent reading. In the seventh and eighth grades the pupils are growing into a new social point of view. There is more opportunity in these grades to use oral reading as a means of pleasure and recreation to others. But the proportion of time devoted to silent reading in these

grades depends considerably upon the extent to which the pupils have reached the proper standards in silent-reading ability.

Essential differences between the oral and the silent-reading lesson. In this treatment it is not meant that in the oral-reading lesson there would be no silent reading, or that in the silent-reading lesson there would be no oral reading. In the usual oral-reading lesson, all the material is read aloud consecutively, sentence by sentence or paragraph by paragraph. The oral reading and the consecutive treatment are essentials to the method. In the silent-reading lesson, both are only incidental. While there may be occasional oral reading of choice bits, or of a sentence or paragraph to prove a point, or clear up the discussion, only a small part of the material is read aloud. The material may be considered in recitation in the consecutive logical order of the selection, or it may be discussed in a psychological order characteristic of the problem method.

The silent-reading method is more than training exercises. There may be silent-reading preparation in the study period for class discussion of the content with little or no silent reading in the recitation. On the other hand, the silent reading may be done entirely within the recitation period. Some plans of handling silent reading might eliminate any division of the time into study and recitation. Some conceive the silent-reading lesson as merely the use of training exercises.[1] The writer conceives this as one type, but holds that there is also plenty of opportunity for silent-reading lessons in which the primary purpose is to give the pupils valuable content-experience, without specific reference to silent-reading training. An important advantage

[1] This seems to be the point of view in the article, "The Selection of Silent-Reading Textbooks," by Ernest Horn, in *Journal of Educational Research*, October, 1920.

of the silent-reading lesson is the variety of procedure that is possible.

When to use the oral and when the silent-reading method. After the pupil has acquired an ability to read with ease and fluency the vocabulary which he understands orally (this should be accomplished by the end of the third grade), the oral method should not be used unless there is a definite purpose in the teacher's mind in using it. It should always be used in teaching a poem, in order to have the child feel and appreciate the rhyme, rhythm, and other literary values which are essentially auditory. Likewise it should be used in teaching the oration. In general, it may be stated that, above the primary stage of learning to read, the oral-reading method should be used with such types of material as would be likely to be read orally in out-of-school reading, and that the silent-reading method should be used in connection with those types of material that are ordinarily read silently rather than orally in out-of-school situations. This means that recreative reading of books and selections that are suitable for extensive rapid reading would be handled by the silent-reading method. Certain parts might well be studied intensively, and read orally for certain auditory effects. Practically all informational material would be taught by the silent-reading method. There is a great body of reading material that provides experiential reading in adventure, geography, history, biography, travel, etc., which should be handled by the extensive silent-reading method.

Silent-reading lessons classified. Silent-reading lessons may be classified in several different ways.

I

1. Silent-reading lessons involving the use of the same material by each pupil of the class.
2. Silent-reading lessons involving the use of different material by each of two or more groups within the class.

3. Silent-reading lessons in relation to the use of different material by each member of the class.

II

1. Silent-reading lessons without preliminary preparation, involving silent reading in the recitation of the whole unit, or consecutively by parts.
2. Silent-reading lessons with preliminary preparation, the recitation consisting mainly of consideration of the content on the material read outside of the recitation.

III

1. Content silent-reading lessons in which the primary purpose is experience for the pupils.
2. Training silent-reading lessons in which the primary purpose is to increase rate, improve comprehension, or both.
3. Test lessons in silent reading.

The following organization will be the guide in the discussion of silent-reading lessons in which the content values constitute the primary purpose.

CONTENT SILENT-READING LESSONS

1. Involving the use of the same material by all pupils of the class. Problem lessons.
   (*a*) Problems of a general nature.
   (*b*) Problems in relation to illustrative representation.
   (*c*) Problems in relation to dramatic reproduction.
2. Involving the use of different material by each of two or more groups within the class. Books provided in sets of five or more.
3. Involving the use of different material by each pupil in the class.

3. PLANNING THE SILENT-READING LESSON

Stress the larger values. Growth in reading ability means ability to read in increasingly larger units of thought. In planning a content silent-reading lesson, the teacher's main problem is to plan the work so as to throw the empha-

sis upon the larger units of thought. Details should be considered in their bearing upon these larger values, rather than as mere fragments. It is highly important that the pupils should realize, as a result of the instruction, that details are not the main values in reading, but that the comprehension and appreciation of the major thoughts and feelings are the ultimate ends to be sought. It will be very difficult to realize these larger values until teachers fully appreciate that often the best method of procedure does not involve a consecutive consideration, paragraph by paragraph, of the unit.

The problem method. Probably there is no field wherein the problem method is more needed than in the teaching of reading in the intermediate and upper grades. Real problems, involving a critical application or reorganization of ideas, will aid in getting the perspective view before the pupils and will be a guide to the teacher in stressing the larger values. Before attempting an assignment, the teacher should carefully study the unit of subject-matter to discover what are the main content-values for the pupils. Then formulate a few well-selected problems that will be connecting links between the pupils' interests and these major values.

Characteristics of good problems. The problem differs from the factual question in that its solution involves the gathering of data from the reading and its application or reorganization in terms of the problem, while the factual question is specifically answered in the reading matter in the same terms as called for by the question. The problem should be so stated as to arouse keen interest, on the part of the pupils, in their silent-reading study and in the recitation discussion. The wording should be definite and clear. Problems which lead to a difference of opinion, resulting in debate that involves the use of data from the reading matter,

are valuable. The problems should be such that their discussion will bring into prominent attention the main ideas, purposes, or values of the unit being read. Problems that involve ethical evaluation without preaching also are desirable.

Assignments. The raising of the problem or problems so that they become real and stimulating involves skill. The pupil's interest will depend to a considerable extent upon the way in which the teacher gets the problem before the class. Usually too little time is given to assignments. They are often made hurriedly, at the close of the recitation or when the time is at hand for the study period. Of course the amount of time will depend entirely upon the nature of the assignment. In some cases only a few minutes will suffice, while in other cases the last half of a recitation may not be too much time. In case the unit of reading matter to be taught is a long one which will occupy a series of recitations, it is sometimes advisable to use one whole recitation to get started, and to raise the problems the class is to work upon for the succeeding days. This sort of lesson may be called a preparatory, a motivation, or a study-recitation-and-assignment lesson.

More time and attention should be given, in the assignment, to the instruction of the pupils in the art of efficient silent reading. They should often be told how long it should take them to read a certain unit. In assigning a new unit of reading matter, it is usually well to advise the pupils to read the whole unit through rapidly first, merely to get a general perspective view, and then to do such additional reading as is necessary to solve the problems assigned. They should often be directed how to attack a given problem. Frequently questions and directions subsidiary to the problem should be given. As a rule it will be advisable to write the main problem on the blackboard, and give the suggestive subsidiary questions and directions

orally. A few problems — one, two, or three — carefully and wisely chosen, will be more effective than a long list of questions. Exercises that require the pupil to look for something definite, and to relate details of vocabulary and ideas to the larger values, should be a part of nearly every assignment.

Definite assignments. The following directions and advice regarding assignments are taken from a monograph on *The Teaching of Reading*, issued by the Department of Public Instruction of New Jersey:

> It should be realized that the value of study to the pupil is in direct proportion to the definiteness and the "problematical" nature of the assignment. The more definite and restricted the assignment, the more thought-provoking it is; i.e., the direction, "Make as many words as you can," is not so productive of thought as the direction, "Make as many words as you can, beginning with *a* or *b* or *c*," or, "Make ten words which are the names of objects or of actions," or, "Make ten words with phonogram *ing*, ten with *ace*, etc."
>
> Other problems for study are almost innumerable, such as:
>
> 1. "We are to learn five new words to-day. Pick them out as the lesson progresses."
> 2. "The lesson is about a game. We shall play the game after we have read about it."
> 3. "Give me an account of an experience of your own similar to the one in the lesson."
> 4. "Write the names of each person the story tells about and be ready to state what each person does."
> 5. "Select the most interesting paragraph in the story, or the most important event, or person."
> 6. "Is the story well named?" etc.
>
> A lesson which does not have a definite purpose, clear to pupils as well as teacher, should not be assigned, and children should be trained from the beginning to study and to recite with a definite purpose in mind. This purpose should be present and evident in oral-reading lessons, but it is particularly important in study-reading exercises, if they are to have educational value.
>
> Moreover, the lesson assignments should be of a sort to compel

a process of assimilation of the thoughts of the matter read; i.e., there should be incentives to relate what is read with individual experience. The common practice of having the story repeated substantially as the book gives it is the least valuable kind of exercise. The common practice of having one sentence or paragraph reproduced at a time is also unfortunate, as it prevents the very process of digestion that might naturally go on. Therefore, the direction, "Tell the story," or the question, "What have you read?" is the least desirable of lesson assignments.

Formulation of problems by the pupils. In all types of reading method the pupil should be encouraged to raise problems with reference to matters that are not clear to him, with reference to matters with which he disagrees, or with reference to matters which he would like to have discussed by the class. The mere asking a question about some factual detail by a pupil to trip up some other pupil should not be mistaken for the sort of purposive initiative thinking that raises real problems of importance. Pupils should be trained to see the difference between questions of small import and questions which show critical interpretation. The final aim is to produce critically selective readers.

Occasionally, the full responsibility for formulating the problems for discussion should be given to the pupils. Each pupil may be asked to formulate one problem, the discussion and solution of which will involve some of the leading ideas of the unit. The problems thus formulated could be considered in recitation and arranged according to similarity. Pupils could be asked to show how the discussion of the problem would bring in a certain leading point of the reading matter. The real problems could be separated from the factual questions to illustrate the difference.

Importance of problem formulation. The importance of pupils forming the habit of having specific purposes in their

reading is emphasized in the following excerpts, often quoted by educational writers:

Some great men, always, before reading a book, make a short, rough analysis of the questions which they expect to be answered in it.— *John Morley.*

In reading we do well to propose to ourselves definite ends and purposes. The distinct consciousness of some object at present before us, imparts a manifold greater interest to the contents of any volume. . . . Any one is conscious of this who reads a story with the purpose of repeating it to an absent friend; or an essay, or a report, with the design of using the facts or arguments in debate; or a poem, with the design of reviewing its imagery and reciting its finest passages. . . . The private history of every self-made man, from Franklin onward, attests that he selected his books with distinct reference to the purposes for which he used them. Indeed, the reason why self-trained men so often surpass men who are trained by others, in the effectiveness and success of their reading, is that they know for what they read and study, and have definite aims and wishes in all their dealings with books.— *Noah Porter.*

McMurry says:[1] "The unquestioning frame of mind that allows a sympathetic approach to an author marks one stage in study, but this must be followed by the critical attitude." Pupils may be asked to read a unit for the purpose of first getting an accurate understanding and impression, and then raising questions about defects or about any points of disagreement between the author and himself.

The plan sometimes followed by teachers of asking the pupils to write a certain number of questions on a selection, merely to give the pupils something to do, fails to result in the kind of purposive thinking in reading that is desired. Usually, while some attention is given in recitation to the questions written out by the pupils, there is little done to

[1] McMurry, F. M. *How to Study*, p. 142. Houghton Mifflin Company.

help the pupil distinguish between factual questions and specific purposes in the form of problems. The situation under which pupils are asked to formulate problems should be so stimulating that real interest will accompany his effort.

4. Illustrative Silent-Reading Lessons

In order to illustrate the various points made in the preceding pages, and to make clear how to teach content silent-reading lessons, a detailed account is given of a number of such lessons in different grades, involving the use of the short unit, the medium-length unit, and the book as a unit.

I. "The Prodigal Son" — a Fourth-Grade Lesson

In one of our Fourth Readers is the story of "The Prodigal Son," about two pages. In the assignment for study, the pupils were asked first to read the story through rather quickly from beginning to end, then to re-read it, considering the following problem questions:

1. Which of the two sons do you like the better? List the points in favor of the older son. List the points in favor of the younger son. List the points against the younger son. List the points against the older son.
2. This story was told by Jesus to illustrate a father's love for his son. Select three sentences which show the father's love, and indicate your selections by page and line.

The opinion of the class was about evenly divided on the first question. The lists suggested were worked out and formulated on the blackboard as group work, and each pupil left to decide for himself. The purpose of the problem was to get the pupils to examine the facts critically. A problem which leads to debate through difference of opinion is a fine type of problem, provided, of course, that its discussion involves the leading facts in the reading material.

The spirit and enthusiasm with which the pupils debated this problem showed that this lesson, which might otherwise have been somewhat of a bore to the pupils, was a real enjoyment. The second problem, of course, was for the purpose of centering their attention upon the main idea running through the story. Details with reference to the pronunciation of words and the meaning of words and phrases came up for attention from time to time throughout the recitation, but always as subordinate elements in relation to a larger problem.

II. ANOTHER FOURTH-GRADE SILENT-READING LESSON

The following is an account of three recitations on "The Magic Prison," a selection of thirteen pages from *The Riverside Fourth Reader*. "The Magic Prison" is a story of a little prince who had become so selfish and peevish through flattery and indulgence that the parents had to send for the fairy godmother, who took the little prince to a magic prison. The room was lavishly furnished. There were jars of perfume, an abundance of candy, fruits, and the like to eat, and comfortable couches and soft pillows. There was a beautiful songbird in a cage. The walls consisted of mirrors alternating with windows all around the room. From the windows could be seen a variety of beautiful scenic views. The boy spent his time indulging himself in enjoyment before the mirrors. He forgot to care for the bird and never noticed the scenes from the windows. The windows gradually grew smaller until they ceased to exist. The perfume was gone, the couch had turned to iron, the candy to stones, and the fruit had disappeared except a withered apple. He screamed and kicked and tried to escape until exhausted. Finally he became sorry for the bird calling in the dark. Through a series of kind acts for

the bird, the windows, step by step, came back to normal size, and the boy secured his release and return to his parents. He remained a loving, kind prince, and became an ideal king.

The purposes of the first recitation were to observe the pupils in their silent reading, noting cases of slow eye-movement, lip-movement, etc., to get the class started in the study of the story, and to make the assignment for the following study and recitations. The pupils were told to begin the story and read it through silently. In about eight minutes two pupils had completed reading the story of thirteen pages. Then they were all asked to stop and report the number of pages read. Some had read only six pages. The class was questioned upon the first few pages of the story, and it was noted that the slowest readers did not respond as well as the fastest readers. Certain advice was given about reading habits, such as inhibiting lip-movement, concentration of attention, quick eye-movement, etc. Then the assignment for the following study and recitation was made. They were told to complete the reading of the story at as rapid a rate as they could to get the gist of the story, then to go over it again, considering the following questions, which were written on the blackboard:

1. List three words that describe the Little Prince.
2. Be able to describe the inside of the Magic Prison.
3. What made the windows grow narrower?
4. How did the prince cause them to begin to open again?
5. List three words that describe the prince when he returned home.

The second recitation involved a consideration of the problems, the discussion of which brought out the main points of the story and gave some opportunity for purposeful vocabulary work. For the third recitation the pupils

were asked to take the books home, select a paragraph particularly interesting, and practice reading it to the folks at home so they could read it to the class. One choice was made in class as an illustration of a good choice. In addition the pupils were asked to list and number the five acts of kindness on the part of the boy to the bird, resulting in the gradual reappearance of the windows and the final release of the boy. During the assignment the first one was selected by the pupils and listed as follows:

Acts of Kindness

1. He gave the bird some water, resulting in the appearance of a tiny window opening.

During the third recitation these lists of acts of kindness were read by the pupils, and commented upon by the pupils and teacher. Then the pupils read to the class the selections chosen during their home preparation for audience reading. About twelve pupils read. As one pupil read to the class, the other pupils closed their books and gave full attention to the reader, with the problem in mind as to whether the pupil had given a satisfactory reason for choosing the selection being read. The previous study and recitations gave a familiarity with the thought and the words, eliminating hesitancy and making the reader-audience situation easier of realization for both the reader and audience. The social value of such a classroom situation was clearly greater than the ordinary consecutive oral-reading plan.

III. A SERIES OF FIFTH-GRADE SILENT-READING LESSONS ON "SOME MERRY ADVENTURES OF ROBIN HOOD"

A unit of reading material, such as *Some Merry Adventures of Robin Hood*, by Pyle, is well adapted for extensive silent reading. The book consists of twelve chapters, and 176 pages. It was used with an upper fifth-grade class,

taught by Miss Blanche Turechek. Ten recitation periods of thirty minutes each were used. The following are representative of the problems used as a basis of reports on assignments:

In the shooting of the deer which led to Robin Hood becoming an outlaw, who was most to blame, Robin Hood or the foresters?
Why was Little John so named?
What was the Sheriff's purpose in holding a shooting-match?
In what three ways did Robin Hood disguise himself so that the Sheriff did not know him?
What is the point of highest excitement in the chapter?
Select witty lines in this chapter.

The assignment involved one or two chapters to a recitation. The pupils were told to read the chapter through first without reference to the questions, and then to go over it again considering the questions and exercises written on the board for the chapter. The oral reading was of two types, that which came in naturally to prove points, and that which was planned as a part of the procedure in relation to a problem, such as — "Select a witty saying in the chapter, write the page and line on a slip of paper, and be prepared to read it to the class." After the book was completed chapter by chapter, one recitation was used to get a perspective view of the whole with a consideration of such problems as the following:

Cite incidents showing Little John as the right-hand man.
List six places where Robin Hood and his band outwit the Sheriff.
Name the men Robin Hood could not overcome in single combat.
List five characteristics of Robin Hood's personality which helped to bring him good fortune throughout the stories.

A poor way to proceed. The procedure with the unit of reading matter mentioned above was radically different

from the procedure the writer once observed in connection with a similar unit. An eighth-grade class was studying a school edition of *Ivanhoe* containing two hundred and eight pages. The method used was that of reading it orally and consecutively, page by page, with discussion of the details. The discussion of the class was centered largely upon minor details, with little consideration of the larger problems which might have been discussed after the pupils had all read the whole story silently. The class had completed the reading of a little over half of the book after five weeks, or fifteen recitations. However, upon inquiry from the pupils, it was discovered that most of the class had completed reading the book silently on the side at odd times. With any literary material of this kind there should be some oral reading, but to attempt to read orally all of a unit of this length is not only objectionable because it tends to throw the discussion too largely upon small points, but also because it is too slow a procedure with reference to the amount of material the class is able to cover, and it tends to slow up the individual rate of silent reading. The point is that in the past this type of oral-reading procedure has been altogether too common, due to a conception handed down that a reading recitation means oral reading. We are coming to realize that the development of efficient silent readers is the most important phase of the reading problem in the intermediate and upper grades. The appreciation of good reading material of various types, including the distinctly literary types, of course, is also important, but it is believed by the writer that, except in the case of poetry, pupils get more enjoyment and appreciation through the silent-reading method.

Silent reading and study. The tendency in recent years has been to place greater stress on the study methods and habits of the pupils than formerly. A careful observation

of the silent-reading method will reveal the fact that this method tends to place greater emphasis on the study of the pupil. In the oral-reading method the pupil who had made little headway in his study could follow along and do about as well as though he had studied vigorously. But in the silent-reading method the pupil is practically unable to participate in the development discussion unless he has read with some degree of efficiency during his study-time. It also reveals to the teacher, and to the particular pupil as well, valuable information as to the pupil's silent-reading efficiency, and should result in some wholesome advice as to how to improve in silent reading. There is undoubtedly a vital relationship between the pupil's silent-reading efficiency and his efficiency in study in the content subjects.

IV. A SEVENTH-GRADE SILENT-READING LESSON

The following is an account by Miss Lucille Murphy of a recitation in silent reading with a seventh-grade class.

Material: How I Killed a Bear, by Charles Dudley Warner.
Primary purpose: 1. To develop appreciation of the humor.
Secondary purpose: 2. To improve comprehension and increase rate.
Problem: To plan a motion picture based upon this story.

Statement of the problem. "We see a great many moving pictures with many different plots. Where do you suppose the motion-picture director gets the stories for all the pictures he must produce? One pupil answered that people write them, and another soon suggested that they take some from books. We are going to read a story this morning called *How I Killed a Bear*, that I believe could be worked into an interesting motion picture. For the next half-hour let us forget that we are pupils of the Gardenville School, and let us be motion-picture directors. Let

us read through this story from the standpoint of a director, and decide what scenes we will include and in what order."

Solution of the problem. "We will read ahead until we have decided upon the opening scene." The children set to work with a will, each one hoping to be the first to discover the opening scene. In a short time some one suggested it, adding graphic suggestions as to the arrangement of the stage and the action of the characters. All agreed to this, and set to work to find the next scene. Here a difference of opinion arose. Some pupils wanted to include the account of the hero's previous experiences with a gun, but others objected on the score that this did not properly belong to the action, *How I Killed a Bear*. Some asked, "Well, suppose you do include it, how are you going to connect it with the story?" This objection was quickly answered by a wide-awake boy who responded at once, "Don't they often show what people are thinking about in motion pictures? All you would have to do would be to have him hold his gun and look at it as though he were thinking, and then show these things." Here the teacher stepped in. "Before we can decide what to include in our picture I believe it will be necessary to decide whether the picture is to be exciting, funny, sad, or romantic." The name of the story suggested exciting to some, while others, influenced by the humorous account of the hero's past experience with a gun as just read, insisted that it would have to be funny. The teacher suggested that the class read on before deciding.

The humorous account of a colored cook's encounter with a bear was read by the children with general amusement, as they were now on the lookout for humor. One member of the class, who had insisted that this would make a good humorous picture, fearing that those on the opposing side would miss the point of the account, spontaneously rose and read aloud as soon as he discovered it, "He did not

know whether she would agree with him." At this point all agreed that the picture was to be humorous. "Then if our picture is to be humorous, what kind of incidents must we be sure to include?" "Funny," the pupils replied in chorus.

As the pupils went on to discuss each scene, even such minute detail as the "glad surprise" of the bear were appreciated. The pupils decided that they would have to have a well-trained bear, for if he failed to look glad the audience would lose one laugh. They decided to include what the man was thinking when the bear came toward him, for it would certainly add humor. They explained that the scene in which the hero relates his experience to his home folks would have to be liberally interspersed with leaders, for the humor lay in the swift repartee. Then came a heated discussion as to the closing scene. Some wished to stop with the procession carrying the bear homeward, others with the crowd who assembled to view it, others with the hero just dropping off to sleep with "the last delicious thought," "I have killed a bear." This last suggestion was finally agreed upon, for the pupils decided that if it were presented skillfully it could be made very funny.

Value of such a lesson. The writer observed a part of this recitation, and was impressed with the enthusiasm and interest with which the pupils read and discussed. This is a fine example of the study-recitation type of silent reading, which should be used occasionally for the purpose of observing the pupils' silent-reading habits and for the purpose of developing better study habits. However, most of the silent-reading lessons should be of the type requiring definite study preparation in connection with problems set by the teacher or conceived by the pupils. This particular recitation is especially good in several respects. The pupils were

learning how to select, compare, judge, exclude, appropriate, put together, and draw conclusions. It forced the slow readers to become more alert, concentrate better, and increase their rate of reading. The discussion helped them to keep the connection, to see their lack of thought-getting, and provided a motive for renewed effort. It resulted in keen appreciation of the characteristic elements of this unit of literature. The absence of oral-reading in no way hindered the appreciation of the humor of the selection. In fact the rapidity of the silent reading was a distinct advantage over the slowness of oral reading, in so far as the appreciation of the humor was concerned.

The recitation just described illustrates the advantage of one major problem as a substitute for the oral-reading in serving as a steering compass as the recitation proceeds. One problem here sufficed for the consideration of a unit of twelve pages of average-sized print. Note how the teacher divided the main problem into subsidiary problems:

Major problem: To plan a motion picture based upon this story.
(*a*) Scenes — number, order.
(*b*) What to include in the scenes.
Picture to be exciting, funny, sad or romantic?

Note how the decision to make the picture " funny " provided a constant contact between the details and the teacher's main purpose in developing appreciation of the humor. Also note that the pupils were constantly told to look for something definite. For instance, at the beginning they were told to decide upon the opening scene. In this recitation the pupils' attention was centered upon the larger values, but they were constantly scrutinizing and analyzing detail and reorganizing it in terms of the ultimate outcomes the teacher desired to have realized.

A word of warning may not be out of place with reference to attempts to use the motion-picture problem in connection with units to which it will not apply. One of the most important parts of the teacher's preparation for teaching a unit of reading matter is the formulation of *appropriate* problems. The selection of the problem used in the preceding illustration was very fortunate, but the writer has seen attempts by other teachers to use this same problem, with units not containing material for a good motion picture, which were unfortunate. The skillful teacher will make sure that her problems are adapted to the content of the reading matter, and that their solution will focus attention upon the leading ideas.

V. A SERIES OF FIVE EIGHTH-GRADE RECITATIONS ON "THE MAN WITHOUT A COUNTRY"

First recitation. The following assignment was made preliminary to the study period for the recitation:

> Read the book through as rapidly as you can, simply to get and enjoy the story. If you are a rapid reader, you can do this in thirty minutes. If you do not complete it during the period, take the book home and complete it.

The time set for reading the story was estimated in the following manner: The number of words in each of several lines was determined. There appeared to be an average of eight words to the line. By multiplying by the number of lines on a page, we found the estimate for a page to be two hundred and forty-eight words. By actual count this page contained two hundred and forty-five words. According to the standard rate of reading for the average eighth-grade pupil, this is about the number of words he should read in a minute. There are forty-two pages in the story. An average reader would then complete the story in from

forty to forty-five minutes, and a rapid reader in about thirty minutes.

At the beginning of the first recitation the following list of problems were placed upon the blackboard, and all the pupils were asked to copy them into their study notebooks:

1. Give facts and incidents that show how Nolan was punished for damning the United States and wishing never to hear of her again.
2. What were the main activities that Nolan had for occupying his time? List four of them in their order of importance.
3. Prove that Nolan loved his country dearly.
4. Contrast Nolan's character as a young man, and his character as revealed in the story from about the age of forty until his death.

There was some discussion as to the time it took different pupils to read the story, in order to direct their attention to rate as a factor in efficient reading. Then they were told to note how well the rapid readers were able to respond to the above questions in comparison with the slowest ones. Then followed a discussion of the first problem. Many interesting contributions were made. A few had to be ruled out as not being relevant to the problem. A summary was made of the more important ones. A beginning on the second problem was made. During the study period for the second recitation the pupils were asked to formulate the list called for in the second problem, and collect facts for a debate on the third.

Second recitation. The second recitation opened with a consideration of the lists in answer to the second question. Differences of opinion as to which activities should be included in the approved list and as to their order of importance brought in a discussion of a great many interesting details, compelled the pupils to weigh values, select and reject, to "give reason for the faith that was in them,"

and resulted in considerable debate in which the teacher was a tactful and judicious referee. The value of a correct solution of the problem was not nearly so great as was the thinking that was aroused and the experience provided by this procedure. A beginning was made on the third problem, and groups voluntarily arranged to debate the question. Some whose memory clung more to the first part of the story chose the negative. The remainder of the pupils agreed to report upon the fourth problem.

Third recitation. During the informal, promiscuous debate the pupils spontaneously arose at different times and read sentences or paragraphs to support their points. Of course the poorer readers and thinkers who had selected the negative were routed by those on the affirmative, but the losers had learned, in a concrete way, something of the importance of relative values in drawing conclusions.

Fourth recitation. In the consideration of the fourth problem there was opportunity to emphasize the more important ethical values of the story in relation to character development. For the closing recitation the following problem was assigned:

> Select one of the most interesting incidents and be prepared to read it to the class.

A number were suggested by the pupils and they were left to make their own selections, with the caution that the selection must be brief so there would be time for a good many to read.

Fifth recitation. The last recitation was given over to the enjoyment of the audience reading indicated in the problem assigned.

It will be seen that in this plan there is no attempt to go through the story consecutively from the beginning to the end. Oftentimes the discussion on one of the problems would necessitate the pupil's relating a part of the story,

or a questioning of certain pupils about the facts of the story, but these factual reproductions and questions were always subsidiary elements to a problem involving concentration upon the large view of the story. Pupils who were able to take little or no part in the discussions were stimulated to read more selectively, and with greater concentration in their study-preparation for the next recitation. This type of oral reading and the type indicated in the fifth problem have some incentive, some purpose in contrast to the procedure which involves oral reading because of a vague notion that all the material in the reading lesson must be read orally.

Provide an abundance of red-blooded silent-reading material. It will be noted that the first assignment in the lesson last given provided for a rapid reading of the whole of *The Man Without a Country* at one sitting. This is the way the average individual desires to read a unit of this type in the ordinary life situation. It is also true that pupils in school desire to go through to the end of an absorbing story of this kind without interruption, and without deliberation upon any set problems or points to watch for. If there were more provision in school for this kind of reading experience, with real red-blooded material that appeals to the pupils' love of adventure and spirited action, the teacher would have less difficulty with pupils reading the forbidden dime novel under cover of a large geography book. Irvin Cobb [1] testifies that, if he had a son twelve to fourteen years old, he would supply him liberally with reading matter of the type of the Nick Carter, Cap Collier, Deadwood Dick, and the Jesse James books, and say to him:

Read them openly. . . . Read them for their brisk and stirring

[1] Cobb, Irvin. "A Plea for Old Cap Collier"; in *Saturday Evening Post*, July 3, 1920.

movement; for the spirit of outdoor adventure and life which crowds them; for their swift but logical processions of sequences; for the phases of Pioneer Americanism they rawly but graphically portray, and for their moral values. Read them along with your Coopers and your *Ivanhoe* and your Mayne Reids. Read them through, and perhaps some day, if fortune is kinder to you than ever it was to your father, with a background behind you and a vision before you, you may be inspired to sit down and write a dime novel of your own almost good enough to be worthy of mention in the same breath with the two greatest adventure stories — dollar-sized dime novels is what they really are — that ever were written; written, both of them, by writing men, who, I'm sure, must have based their moods and their modes upon the memories of the dime novels which they, they in their turn, read when they were boys of your age. I refer to a book called *Huckleberry Finn*, and to a book called *Treasure Island*.

5. Lists of Books Suitable for Use

Books as interesting as a dime novel. In 1907 Professor W. W. Charters wrote to twenty-four of the largest cities in the United States and asked the city librarian to send him the titles of the twelve books which boys of the dime-novel age found to be as interesting as the dime novel. In 1917 he wrote again, and from the replies compiled a list of the most popular books of this type. This list he published [1] and it is reproduced below. The numbers following each title indicate the frequency of mention by the librarians of the twenty-four cities.

Stevenson: *Treasure Island* (17).
Clemens: *Tom Sawyer* (13).
Otis: *Toby Tyler, or Ten Weeks with a Circus* (10).
Verne: *20,000 Leagues under the Sea* (9).
Altsheler: *The Young Trailers* (8).
Clemens: *Huckleberry Finn* (6).
Drysdale: *The Fast Mail* (6).

[1] *School and Society*, March 13, 1920. Also reproduced in the *Course of Study* for the Atlanta Public Schools for 1920–21.

Carruth:	*Track's End* (5).
Grinnell:	*Jack, the Young Ranchman* (5).
Masefield:	*Jim Davis* (5).
Altsheler:	*Last of the Chiefs* (4).
Barbour:	*Crimson Sweater* (4).
Burton:	*Boys of Bob's Hill* (4).
Cody:	*Adventures of Buffalo Bill* (4).
Defoe:	*Robinson Crusoe* (4).
London:	*Call of the Wild* (4).
Monroe:	*Cab and Caboose* (4).
Quirk:	*Boy Scouts of the Black Eagle Patrol* (4).
Schultz:	*With the Indians in the Rockies* (4).
Altsheler:	*Horsemen of the Plains* (3).
Brown:	*Two Boys in a Gyro Car* (3).
Grinnell:	*Jack among the Indians* (3).
Malone:	*Winning His Way to West Point* (3).
Mason:	*Tom Strong* (3).
Moffet:	*Careers of Danger and Daring* (3).
Sabin:	*Bar B Boys* (3).
Sabin:	*Buffalo Bill and the Overland Trail* (3).
Stevenson:	*Young Train Dispatcher* (3).
Wallace:	*Wilderness Castaways* (3).

An abundance of material for extensive reading experience that partakes of the spirit of travel, of contest, of exciting experience, of spirited conversation, of rapid action, of heroic endeavor, of courageous battle, in short, that carries the pupil through the whole round of world situations and experiences in the way in which the child and youth desire to be carried, should be furnished for classroom purposes. Much of this should be read by the pupils without particular classroom consideration. Considerable amounts should be considered class fashion as *The Man Without a Country* was treated in the series of lessons previously described.

List of books suitable for class use, by grades. The following is a brief list of books suitable for classroom use for extensive silent-reading purposes, arranged by grades:

Grades 3 and 4

Defoe:	*Robinson Crusoe.*
Baldwin:	*Old Greek Stories.*
Baldwin:	*Old Stories of the East.*
Stickney:	*Andersen's Fairy Tales.*
Wiltse:	*Grimm's Fairy Tales.*
Barrie-Perkins:	*Peter Pan.*
Shaw:	*Big People and Little People of Other Lands.*
Andrews:	*Seven Little Sisters.*
Cowels:	*Going to School in Animal Land.*
Chance:	*Little Folks of Many Lands.*

Grades 4 and 5

Cellodi-Cramp-Lochwood:	*Pinocchio.*
Lane:	*Arabian Nights Entertainments.*
Washburne:	*Indian Legends.*
Pyle:	*Some Merry Adventures of Robin Hood.*
Sewell:	*Black Beauty.*
Schultz:	*Sinopah the Indian Boy.*
Moran:	*Kwahu the Hopi Indian Boy.*
Hawthorne:	*The Wonder-Book.*
Carroll:	*Alice in Wonderland.*
Perkins:	*The Japanese Twins.*
Otis (Pioneer Series):	*Benjamin of Ohio.*
McDonald and Dalrymple (Little People Everywhere Series):	*Betty in Canada.*

Grades 5 and 6

Warren:	*King Arthur and His Knights.*
Swift:	*Gulliver's Travels.*
Leblanc:	*The Blue Bird for Children.*
Mabie:	*Norse Stories.*
Kipling:	*The Jungle Book.*
Sharp:	*Beyond the Pasture Bars.*
Schwartz:	*Wilderness Babies.*
Ouida:	*The Nürnberg Stove.*
Seton:	*Lobo, Rag, and Vixen.*
Seton:	*Krag and Johnny Bear.*
Harris:	*Uncle Remus.*

Hawthorne:	*Tanglewood Tales.*
Ruskin:	*King of the Golden River.*
Wyss:	*Swiss Family Robinson.*

Grades 6 and 7

Mark Twain:	*Adventures of Huckleberry Finn.*
Hasbrouck:	*The Boys' Parkman.*
Spyri:	*Heidi.*
Aldrich:	*Story of a Bad Boy.*
Eggleston:	*Hoosier School Boy.*
Dodge:	*Hans Brinker.*
Mabie:	*Heroes Every Child Should Know.*
Coe:	*Heroes of Every Day Life.*
Grenfell:	*Adrift on an Ice Pan.*
Sharp:	*Roof and Meadow.*

Grades 7 and 8

Curtis:	*In the Land of the Head Hunters.*
Curtis:	*Indian Days of Long Ago.*
Wells:	*How the Present Came Out of the Past.*
Mark Twain:	*Travels in History.*
Mark Twain:	*Travels at Home.*
Stevenson:	*Treasure Island.*
Rutland:	*Old Testament Stories.*
Helen Keller:	*The Story of My Life.*
Hawthorne:	*The Great Stone Face.*
Irving:	*The Legend of Sleepy Hollow.*
Kipling:	*Captains Courageous.*
Mark Twain:	*The Prince and the Pauper.*
Dana:	*Two Years before the Mast.*
Hale:	*The Man Without a Country.*
Hughes:	*Tom Brown's School Days.*
Stowe:	*Uncle Tom's Cabin.*

Silent-reading selections, by grades. The following is a list of readings, arranged by grades, with suggested problems and exercises:

Grade 2

"The Wise Lion" — 6 pages — *Edson-Lang First Reader*

1. Just why do you think the Lion was wise?

2. What did the rabbit think that was foolish?
3. What did the rabbit do that was foolish?

"The Fairies' Secret" — 7 pages — *The New Barnes Second Reader.*

1. Name the three kinds of fairies mentioned.
2. Write the sentence that is the fairies' secret.

"Little Two Eyes" — 13 pages — *Free and Treadwell First Reader.*

1. Write four things the two sisters did to make Little Two Eyes unhappy.
2. Why do you think the little old woman and the prince helped Little Two Eyes?

Grade 3

"The Little Builder" — 5 pages — *Baldwin and Bender Second Reader.*

1. Write the five words that tell the five persons and things the boy appealed to for building blocks.
2. Do you think any little boy would have done what this boy did to get the blocks?

"Cedar Tree's Reward" — 9 pages — *Story-Hour Second Reader.*

1. Write the names of the four trees appealed to by the blue bird.
2. What was the cedar tree's reward?

"Aladdin and the Wonderful Lamp" — 9 pages — *Merrill Third Reader.*

1. Read through to the end rapidly to get the story. Do not bother about words you cannot pronounce.
2. Why was the stranger so good to Aladdin in the first part of the story?
3. How did the stranger intend to reward Aladdin for getting the lamp?
4. Mention five incidents in the story where magic worked a wonder.
5. Go through the story again and write the 8 words most unfamiliar to you.

"The Faithful Beasts" — 10 pages — *Literary Reader, II.*

1. Copy the sentence which tells why the animals helped the man.
2. What did the mouse do to help, that neither the bear nor monkey could do?
3. What did the bear do to help, that neither the monkey nor the mouse could do?

4. Make a drawing to illustrate lines 6, 7, 8, and 9 on page 83. (Bear swimming, monkey on bear's back with magic stone in his mouth, mouse in bear's ear.)

"The Stone Cutter" — 5 pages — *Riverside Third Reader.*

1. Read the story through.
2. Re-read and write the places where something important happened.
3. Be able to name the people in the story.
4. Glance through the story hastily, counting the number of wishes Hofus made, and write the number.
5. What did Hofus learn?

Grade 4

"The Bear, the Boar, and the Fox" — 5 pages — *Edson-Lang Third Reader.*

1. On a sheet of paper plan for three columns, headed like this:

   1. Bear 2. Boar 3. Fox

   Place each of the following under one of the three, as you think is most nearly correct according to the story:

   (1) sly (2) cowardly (3) piggish (4) stupid (5) unfair (6) industrious (7) high-tempered (8) bluffer (9) plower (10) sower (11) boss (12) winner (13) schemer.

"Why the Sea is Salt" — 12 pages — *Story-Hour Third Reader.*

1. According to the story why is the sea salt?
2. What mistake did the rich brother and the captain both make?

"The Emperor's Test" — 12 pages — *Riverside Fourth Reader.* (In dramatic form.)

1. Read the play through rapidly to get the story.
2. In recitation the pupils may act the play without the books. Re-read it carefully so you will know when to talk, about what to say, and what to do. Do not try to memorize the lines. The pupils who are not assigned as characters will be the audience. In case an actor fails one of the audience may take his place.

   (As a part of the assignment the teacher designates a pupil for each of the eleven characters.)

Grade 5

"The Maid of Orleans" — 8 pages — *Natural-Method Fourth Reader.*

1. Read the story through rapidly.
2. In your geography, on the map of Europe, find France and England. Locate the two important cities of France mentioned in the story.
3. Did Joan of Arc succeed or fail?
   (*a*) In what way did she fail?
   (*b*) Did the French succeed in driving the English out of France?
   (*c*) How did her life help the French?
   (*d*) How did her death help the French?

"Who is the Happiest Man?" — 6 pages — *Baldwin and Bender Fifth Reader.*

1. Read the story through rapidly and close the book.
2. Then copy the characters as listed, and place after each the one of the following words which is appropriate:
   wealth *mercy* *wisdom* *service* *martyr*

Characters

Cyrus Solon Tellus
Crœsus The Two Young Men

"The Talking Saddle" — Joel Chandler Harris — 11 pages — Selections from *Riverside Literature for Fifth Grade.*

1. Read to the end rapidly to get the story.
2. Who is the chief character in the story?
3. What is the first thing we learn of Tip-Top that would make an important change in his life?
4. Divide the story into scenes for dramatization.

Grade 6

"Horace Greeley, — Journalist" — 10 pages — *Riverside Sixth Reader.*

1. Give two illustrations of the pluck of the young man.
2. Select three sentences that tell things that Greeley did that helped him succeed.
3. Pluck was one of his characteristics. List five words of your own that describe other characteristics of Greeley.

"The Sugar Camp" — 6 pages — *Literary Reader, Book VI.*

1. What do you think interested the boy most?
2. What would have interested you most?

"When Hannibal Finished the Bridge" — 11 pages — *Boys' and Girls' Sixth Reader.*

(An elephant is used in building the bridge. He scents a jaguar and a death struggle results.)

1. Give two illustrations to show that Hannibal had the feeling of a wild elephant.
2. Select the section of about a half page that you think contains the most thrilling scene.
3. Select the two sections that you think best to read aloud.
4. Show that Tom was a brave boy.

Grade 7

"A Fight with the Pirates" — Stevenson — 8 pages — *Riverside Seventh Reader.*

1. Read through to the end to get the story.
2. Re-read carefully, and make a diagram showing the stockade, the blockhouse, and the location of each of the defenders and the fighting equipment.
3. Which side won?
4. Select three sentences that are good expressions of rapid action.

"An Apple Story" — 9 pages — *The Holton-Curry Seventh Reader.*

1. Read the story through for the enjoyment of it.
2. Explain the pun on "ruminating." If necessary look up its meaning in the glossary.
3. Select five other words upon which the author makes puns, and be prepared to read the puns to the class.
4. Relate the two most ludicrous things that happen in the story.

Grade 8

"The Great Stone Face" — 21 pages — *Elson Eighth Reader.*

HELPS TO STUDY [1]

1. What part of the description of the Great Stone Face do you like the best?
2. What influence had this Face upon the valley? Upon the clouds? Upon the sunshine?
3. Show how each of the four characters failed to realize the ideal.

---

[1] Elson, William H. *Elson Grammar-School Reader,* Book IV (for eighth grade), p. 162.

4. What purpose do you think Hawthorne had in creating these characters?
5. Why did so many people think that each of these men was the image of the Great Stone Face?
6. Why did not Ernest think so?
7. What were the characteristics of the ideal? What words name them?
8. What does the Great Stone Face symbolize?
9. What words tell you the source of Ernest's power?
10. What lines tell you of his humility?
11. Summarize his characteristics.
12. What pictures do you find in the selection?
13. Point out sentences that contain examples of alliteration.
14. Find a humorous sentence.
15. Who were the Titans?
16. Who was Midas?

6. Problems of Illustrative Representation

Types of illustrations. There are a few selections in almost any school reader which are adapted to illustrative representation. This may be in the form of pictorial drawings in black or colored crayola on manila paper, of simple cuttings, of illustrated cuttings, of diagrams or graphs, of silhouette illustrations, of map drawings, or of constructions. As a rule pupils delight in making illustrations.

Purposes. From the viewpoint of the reading, the value of the illustrating is to provide a specific purpose for careful, critical reading, to test the accuracy of the reading, and to make more concrete the content of the material. It provides interesting seat work, and, if skillfully directed, applies the reading ability to a concrete situation for a definite purpose. A finished art production is not at all essential in so far as the value to the reading is concerned. The pupils' crude productions may be fuller of meaning to them than the finished art productions which adorn the pages of their books.

Correlation with drawing. Illustrating reading material provides an excellent opportunity for correlation between reading and the drawing or art work. During reading-time the content may be taught in relation to the illustration work, while the actual drawing or construction is done during drawing-time. In the reading recitation, the problems in relation to the content of the illustrations are raised and the reading-content interpreted in relation to these problems. After the illustrations are made, they are critically scrutinized in reading-time to determine whether they portray correctly the thoughts and ideas of the reading-content. This sort of correlation is of advantage to both the drawing and the reading. It produces better illustrative work in the drawing, and better thinking and richer experience in the reading.

Lesson steps. The following steps come naturally in each illustrative lesson:

1. Assignment. During the assignment the teacher suggests that the pupils may be interested in making some illustrations of a certain type. The following would be a good assignment:

> Read the selection through rapidly to get the story.
> Re-read and decide which type of illustration, construction or crayola drawings it will be best to use.
> Select two passages suitable for illustration.

2. Recitation. During the recitation there is a discussion and decision as to the type of illustration to use. Then the various sections chosen by the pupils for illustration are considered. Any unsuitable ones are discovered by the class and ruled out. A certain number of the best ones are listed, from which the pupils may choose. The content that should go into these illustrations, or the composition of the illustrations, is discussed.

3. Illustrations. The illustrations are made during drawing-time, at home, or during reading-study-time.

4. Second recitation. In the next recitation the illustrations are critically scrutinized. The illustration or illustrations of a particular section are exhibited to the class while the class reads the section carefully, or while a pupil reads the section to the class as audience reading. Is the illustration representative of the general spirit of the story? Does it portray correctly the picture of the section?

An example of an illustration lesson, taken from Irving, will show the possibilities of such work.

ILLUSTRATING "RIP VAN WINKLE" — AN EIGHTH-GRADE LESSON

The writer used the procedure outlined above in teaching *Rip Van Winkle* to an eighth-grade class. The pupils took great pleasure in making the crayola drawings. Some of the illustrations were very good from the standpoint of the principles of drawing, but did not show appreciation of the spirit of the story or accurate portrayal of the facts. Others were rather crude drawings, but showed a grasp of essential values and facts. From the standpoint of the reading instruction, the latter type would be considered the better. Of course there were some that were good in both phases and some poor in both.

The problems raised in the original assignment provided the specific purpose for the silent reading during study-time. Likewise, as the pupils were making their drawings, they would at times refer back to the book and re-read. The pupils placed a title or statement from the story underneath the picture to characterize it.

The greatest value in relation to the development of reading ability was realized during the time that the pictures were being critically considered in relation to the reading-

content. This was conducted as audience reading. One pupil held the drawing so the class could see it. It was necessary to see that the pupil held the picture so that it got the proper light, and so that it faced properly toward the pupils. The pupil who made the drawing read from the story the part he had illustrated. The remainder of the class listened with books closed, and with two problems in mind. Is the picture in harmony with the general spirit and setting of *Rip Van Winkle?* Is there a correct portrayal of the detailed facts given in the selection read?

One boy presented a picture of Rip mending his fence. Some more thoughtful pupils challenged this as not being in keeping with the character of Rip. The pupil who made the drawing was unable to substantiate the fact from any statement in the story. This experience no doubt helped to make a better reader of him. He had failed to verify the facts he portrayed by reference to the reading matter. The failure of pupils to take this step of verification in careful reading is very common. One of the teacher's problems is how to get such pupils to check up their impressions and conclusions by a careful scrutiny of the reading-content. Such experiences as this boy had, under sympathetic and helpful direction, will be a help in that direction.

Many teachers use illustration to excellent advantage without necessarily following the procedure outlined in this instance. The photographic reproductions given opposite show some possibilities of group illustration.

Briggs and Coffman, in their volume on *Reading in the Public Schools*, pages 120–27, show silhouette illustrations for "Old Pipes and the Dryads." Through a series of eighteen simple illustrations the complete story is portrayed. The appropriate sentences accompany each illustration.

1. Robinson Crusoe — Cuttings made by a Fourth-Grade Class

PLATE III. SHOWING HOW A STORY MAY BE ILLUSTRATED

2. Legend of Sleepy Hollow — A Seventh-Grade Construction Project

PLATE IV. SHOWING HOW A STORY MAY BE ILLUSTRATED

Units suitable for illustration. In planning a lesson involving the use of problems of illustration, it is very important to select units that easily lend themselves to the type of illustration contemplated. Units that portray an abundance of action, and scenes with outstanding characteristics, are adapted to pictorial drawings or cuttings. Where the color characteristics are prominent, colored crayolas should be used. Where there is little color, but plenty of action, use black crayola, or make cuttings from black paper and mount them on white paper, or from white paper and mount them on black paper or cloth.

Most teachers in the intermediate and upper grades will have some material that is adapted to illustration by diagrams, graphs, or maps. The " Fight with the Pirates," from Stevenson's *Treasure Island,* will be much more concrete to the pupils if they are asked to make a diagram showing the location of the stockade, blockhouse, etc. This is also a good test of reading ability. A good problem in map illustration to use in teaching is found in a selection in the *Baldwin Seventh Reader* entitled, " The Great Fight at Aldreth," an excerpt from Kingsley's *Hereward, the Last of the English.*

The use made of this latter selection by one teacher came under the observation of the writer. The pupils were asked during their study-time to read the selection through, and then to make a map drawing showing the location of the various points, rivers, etc., mentioned. The stronghold to be attacked by the Normans was upon an island formed by the encircling of a wide river. The only approaches were obstructed by meres, fens, reeds, mud, floating peat-beds, and slimy water. The account is so written that it takes very close reading to visualize the map-scene. Notwithstanding the difficulty of the reading, several of the pupils made diagrams giving a very adequate representation of

the reading matter. This was an excellent test of their reading ability. Several pupils made a flat failure, showing a lack of ability to get anything approaching an adequate conception of the setting through their reading. But the discussion of the maps in recitation and the making by the class of a blackboard map, proving and disproving what should or should not be in the construction of the map, involved such reading activity as these poorer readers were in need of, and did much to clear up their hazy and inadequate conceptions.

7. Problems Relating to Dramatization

An example of such work. Dramatization is a type of problem which may be utilized to excellent advantage in silent-reading lessons with units not written in dramatic form, but having dramatic characteristics. The *Merrill Fourth Reader* has a prose adaptation of Browning's "Pied Piper." This was dramatized by a class as a part of a school entertainment. The study and recitation for this type of silent reading would be about as follows:

Assignment:

1. Read the selection through to get the story.
2. Write out a cast of characters, similar to the one at the beginning of the play on page 280 of your Reader.
3. Decide how many scenes there should be.
4. Decide upon an imaginary stage-setting for each.

Several of the pupils write their cast of characters on the blackboard. They are compared and criticized. References to the text are made when necessary. A correct cast of characters is formulated with the aid of the pupils, if none of the pupils do not already have a correct one. The problems of the different scenes are discussed, and a solution placed on the blackboard. The discussion of the

imaginary stage-setting naturally accompanies the discussion of the scenes. The characters for the dramatization are assigned. Substitutes are assigned for each character, to take part in case of absence or failure. The pupils are told to prepare for the play by becoming thoroughly familiar with the story, so they will know when to talk, what to say, and what to do, and to give particular attention to the characters they represent.

Value of dramatizing. Opportunity is offered to correlate language and reading by having the story dramatized. There would be no attempt to costume or to provide stage-setting other than to use what is at hand in the schoolroom. Children enjoy the imaginary part of it. The dramatizing should be spontaneous and free. If a pupil does not know what to do or say, and continues to delay the play, allow a substitute to take his place. Such a failure should be recognized by the pupils as serious as any other failure in school work due to lack of preparation or lack of ability to comprehend the material studied. The dramatization becomes a test of the pupil's ability to read well silently, provides a motive for his effort in study and recitation, and makes the situation real or concrete to him. The value of the dramatization in relation to silent reading does not lie in the excellence of the dramatizing, but rather in the fact that as a problem-project it forms the basis for the study and recitation procedure for a series of silent-reading recitations. Its primary purpose should be kept constantly in mind by the teacher.

Among some teachers there is an impression that dramatization is merely a primary-grade activity, but dramatization, as a means of motivating the silent-reading work, is adapted to any grade. Especially in the upper grades, where the new social instincts are beginning to play an important part, is dramatization important. The following

paragraphs, taken from Briggs and Coffman,[1] set forth well the social benefits and place of this type of work:

The enthusiasts claim that dramatic work in connection with reading brings the pupil and teacher into a new relation, where, for the first time, they actually become acquainted. Of course this acquaintanceship is unreal and likely ineffective in its results in case the teacher fails to live in the play on the level of her children. However, when this result is achieved, the work will not be pleasurable simply, it will be a positive delight and enjoyment. Unless this spirit saturates the work, the social benefits to be derived from it are of no more real value than superficial manners are to an individual in good society.

A stage effect is never to be sought, merely a realistic reading. Costumes, paraphernalia, a platform — none of these is essential. The imagination will supply them all. All dramatic work in school can be justified only on the ground that it affords an opportunity for reading. It represents, in the first place, the child's interpretation of the selection. After the play has been sympathetically criticized by both the teacher and pupils, it can then be read, or rather re-read, with increased meaning, vitality, and force. So dramatic reproduction stands between reading for understanding on the one hand and reading for interpretation on the other. It is not indulged in for mere entertainment — in fact, it should never be permitted for this alone.

Because of the unique place it holds in the mastery of a given selection, there will be no special time for it, nor can it be given every day. It may be used with increasing frequency, as fluency is gained in reading, but it will always be used more in the lower than in the upper grades.

As indicated above, the art-element is present when children yield with freedom to an intense, urgent desire for expression. The crudities of their speech must be left for future correction. Many of them will drop out, through imitating the teacher, long before the time for correcting them is reached. Of course, all flagrant abuses of language must be corrected, but, in the main, the freedom and inventiveness of the children should not be interfered with.

---

[1] Briggs and Coffman. *Reading in Public Schools*, chap. x. Row Peterson Company.

What not to dramatize. Sara Cone Bryant points out [1] in an effective way what we should not have pupils dramatize:

> The teacher, on the other hand, must avoid with great judgment certain absurdities which can easily be initiated by her. The first direful possibility is in the choice of material. It is very often desirable that children should not be allowed to dramatize stories of a kind so poetic, so delicate, or so potentially valuable that the material is in danger of losing future beauty to the pupils through its present crude handling. Mother Goose is a hardy old lady and will not suffer from the grasp of the seven-year-old; and the familiar tales and fables of the "Goldilocks" variety have a firmness of surface which does not let the glamour rub off; but stories in which there is a hint of the beauty just beyond the palpable — or of a dignity suggestive of developed literature — are sorely hurt in their metamorphosis, and should be protected from it. They are for telling only.

8. Plans for Individual and Group Reading

Group work in silent reading. All of the lessons previously described in this chapter have involved the reading of the same material by all the pupils of a class. All of the pupils work upon the same problems. The study-work is largely upon the individual basis. In the type of recitation common in schools, though, there is some opportunity for coöperative effort. The reaction of the pupils is very largely a response to the teacher as the center of interest and activity. There are those who advocate that the methods of handling the work should be such as to allow more opportunity for coöperative effort on the part of groups within the class. It is claimed that this sort of activity and experience will give a valuable training that is needed in a democracy. One way to encourage group work is to provide reading books in small sets of five to ten.

[1] Bryant, Sara Cone. *Stories to Tell to Children*, p. 39. Houghton Mifflin Company.

Then one group could be assigned a unit of reading matter from one book, and another group from another book. Each group would study in a coöperative way and make a report to the class as a whole.

Reading material in dramatic form [1] is adapted to this type of work. One group is assigned one drama to read silently and, after coöperative preparation, to dramatize for the whole class, while another group is assigned another play.

Books containing short, spirited units of narrative material for reproduction may also be used in this way. The books listed on page 105 for audience reading will be found adapted to the group silent-reading method. During the study period, the group first reads the story silently and works out, in a coöperative way, plans for presenting to the class the content of the unit read. The report may take the form of simply retelling the story, each pupil telling the part assigned to him during the coöperative group planning. It may take the form of dramatizing the story, or exhibiting a series of illustrations with explanations. Or it might take the form of presenting an outline of the material read. In some cases the group might plan the report so that one pupil would report upon the characters, another upon the point of highest interest, etc.

Special plans for grouping. In connection with the reading of books, a group may select a book to report upon to the group. One school possessed five copies of Helen Keller's *The Story of My Life*. A group of five pupils agreed to read this and report to the class as to whether they would recommend the book for the others to read, and to give their reasons.

In some schools, all the pupils of each room are organized

[1] Augusta Stevenson. *Children's Classics in Dramatic Form*, Books I to V. Houghton Mifflin Company.

into teams, three to six teams to the room. There is a captain for each team. Usually each team is given different reading material. A part of the work is in the form of individual study, a part in the form of group conference or oral reading by turns, and a part in the form of a report or contribution by a group to the remainder of the pupils of the room.

While group work has a place in connection with the content silent-reading lessons, the larger portion of the time can probably be most profitably spent in lessons involving the reading of the same material by all members of the class. Even here, of course, there is some opportunity to assign different problems to different groups within the same class.

Individual silent reading. The following lesson, which gives an account of a series of recitations involving the use of different material by each member of a fourth-grade class, illustrates this type of work.

A Fourth-Grade Lesson

From a miscellaneous collection of Third and Fourth Readers, a sufficient number was selected to provide each pupil in a fourth-grade class with a book containing a story of two to eight pages. The first recitation was given over to the distribution of the books, the choosing of the selection by each pupil, and suggestions regarding their silent-reading and study in preparation for their reports to the class. After the books were distributed, it was explained to the class that each pupil might choose a short selection of prose to read silently during study-time with a view to reporting upon it to the class. The teacher inspected the choice of each pupil to see that a selection of the desired type was chosen. Most of the pupils made good selections, but a few needed to be advised individually. Some even chose selections of poetry. This gave a good opportunity to

teach some simple distinctions between poetry and prose. After the selections were all decided upon, the pupils were given suggestions regarding their silent reading and study. They were told first to note the subject carefully, then to read the selection through rapidly, and then to go through it again more carefully, making preparation for the report. Their attention was called to the vocabularies in dictionary form in the back of some of the books, and also to other study helps. Rather definite plans for the reports were then developed. It was decided that, in giving the reports in recitations to follow, the pupil would give the title of his selection, and that one or more of the following might be utilized in connection with the report:

1. Tell the story briefly.
2. Tell why the title is a good one.
3. Suggest problems for the class to discuss.
4. Give opportunity for the pupils to ask questions.
5. Tell what interested you most.
6. Who was the leading character and what was the main thing the leading character did?
7. What was the main point of the selection?
8. Use your own plan in reporting, if you wish.

In the four succeeding recitations all the pupils reported upon their selections. From four to six pupils reported during each thirty-minute recitation. It was necessary, of course, at times for the teacher to guide the report and the discussion. In one case a pupil failed to report correctly an important word in the title, revealing that he had failed to get the main point of the selection. An investigation by a neighboring pupil brought out the main point. The pupil learned a point in pronunciation under a situation more conducive to retention than the usual fourth-grade reading situation. The pupils who had reported were allowed to exchange books, and read whatever interested them during the program study period for reading. In

this way a considerable amount of silent reading was done for the mere pleasure of the pupils, and without reference to any report. At the beginning some of the brighter pupils who volunteered were called upon for their reports, as a means of setting a good example for the less capable ones. Then the reports of the better and of the poorer ones were alternated so as to avoid a situation favorable to a lack of interest.

Use of the room library. A similar plan, which some teachers find feasible, involves the use of the room library, consisting of forty-five books suitable to the grade. One reading period a week for the room is given over to the returning and taking out of these library books, and for the reports upon the books read. A plan similar to the one given above is followed in connection with these reports. This sort of plan enables the teacher to keep in close touch with the recreative reading of the pupils, stimulates interest in such reading, and enables the teacher to have a better knowledge of the pupils' reading interests and to lead the pupils to higher interests and tastes in reading.

PROBLEMS FOR STUDY AND DISCUSSION

1. Why has silent-reading instruction lagged so far behind the recommendations of psychologists and other educational experts?
2. What per cent of the program reading-time, in your grade, should be devoted to silent reading?
3. Do you agree with the statement as to the essential difference between the oral- and the silent-reading method? If not, why not?
4. Do you agree with the general statement as to when to use the oral- and when to use the silent-reading method? If not, why not?
5. Choose a short unit of reading material (three to fifteen pages) and formulate a problem or problems to be used as a basis for the study and discussion. Are the requirements of good problems as stated fulfilled?
6. Select a book for a particular grade of the type of those listed for extensive silent reading. Formulate a problem or problems for one chapter. Formulate a list of problems for use in a final perspective view of the book as a whole.

7. Choose a unit of reading material suitable for rapid silent reading in recitation, according to a plan similar to that given for *How I Killed a Bear*.
8. Choose a selection suitable to use according to the plan described for *Rip Van Winkle*. Choose a selection suitable to illustration by drawing diagrams, graphs, or maps. Choose a selection suitable for a group cutting or construction project.
9. Choose a selection not in dramatic form, but suitable for dramatizing.
10. Formulate a plan for using some particular book, furnished in a set of five to ten copies.
11. Give an illustration of effective group work in silent reading.
12. Try out the plan suggested for a series of recitations devoted to individual silent reading, and report results.
13. Relate a plan for content silent reading different from any suggested in the chapter.

CHAPTER VIII

TRAINING LESSONS IN SILENT READING

Content and training lessons contrasted. In the silent reading discussed in the preceding chapter, the primary aim or purpose lies in the value of the content in the pupils' experience. There are secondary training purposes, but these are always kept subordinate to the content-values. While that type of reading experience is adequate in developing the desired silent-reading abilities on the part of a goodly portion of the pupils, it will not be adequate for another considerable portion. For these, specific training lessons will be needed.

In training lessons the primary purpose will be the training value in relation to the development of the ability to read silently. The realization of content values will be only secondary. This is just the reverse of the situation as to purposes in the content lesson. In the content lesson the method is determined by the content values, while in the training lesson, the method is determined by the training purposes. The training purposes may even determine the selection, arrangement, or organization of the content. In the content lesson we adapt the method to the content values, while in the training lesson the content is formulated so as to be adapted to a specific type of training method.

In the training lessons three main purposes are dominant: to increase the reading rate, to improve the pupils' comprehension of both meaning and organization, and to expand the pupils' vocabulary. We shall consider each of these main purposes, in the order stated.

1. Devices for increasing Rate

Phrase-flashing. The flashing of phrases and short sentences was discussed in Chapter III in connection with

the primary grades. In the intermediate grades and in ungraded rooms for backward pupils, phrase-flashing will be found to be helpful, for pupils who have not developed in reading ability beyond the primary stage, in increasing the length of the unit of recognition in a single pause. Oftentimes the backward pupil is a slow and laborious reader. His oral reading is often characterized by difficulty in quick recognition, lack of phrasing, and repetition. Photographs of the eye-movements of such pupils show many instances of regressive movements and periods of confusion. Phrase-flashing is one means of training for better eye-movement habits. The content should be such as will appeal to the age and interests of the pupils. The following is a set of phrases that would be likely to appeal to the boys:

THE BASEBALL GAME

Play ball	Out field
Play hard	Home run
Run fast	Out at home
Two-base hit	A safe hit
Hit the ball	A foul ball
Foul ball	Out on first
Good play	Good catch

This could be played as a game with any number on a side and with a set of rules, as follows:

A player recognizing a phrase, exposed for two to three fifths of a second, would advance the runners one base. A pupil failing in correct recognition would be out.

A school might print or duplicate a reading lesson on this topic.

In the *Elson Grammar-School Reader*, Book I (fifth grade), at the end of a selection entitled "Capturing the Wild Horse," a number of phrases are listed for special

attention. Such a unit could be used to good advantage in increasing rate by using it as a test lesson in rate. When this has been done, practice phrase recognition for several days, and then test the rate again. The following phrases are listed in the *Elson Reader:*

council of war
toilsome march
finely diversified
diminutive size
pranced off
hotly pressed
pressed him gallantly
unbounded freedom
fringed with trees
autumnal flowers
well mounted
rich herbage
thundering down the valley
scouring down the meadow
headlong chase
swept down
happily arranged
this magic circle
flanking parties
marred the whole scene
dashed furiously

Every second, third, and fourth-grade teacher, and every teacher of ungraded pupils backward in reading, should have several sets of small flash-cards about two and one-half inches by three and one-half inches in size, each containing typewritten or printed phrases.

Reading under a time limit. There are several different ways to proceed in handling a training lesson involving silent reading under a time limit. Two methods of procedure that have been found successful will be described.

Under the first plan, allow the class a specified time for silent reading, such as five minutes. All of the class read the same unit, beginning at the same point. Before beginning, the teacher states that this is an exercise to see how much each pupil can read in five minutes, and be able to reproduce what is read. The pupils begin and stop at the teacher's signals, marking the last word read. As they read, the teacher observes the pupils for habits of pointing with the finger, lip-movement, and vocalization. She also notes the fast readers and the too-slow readers. At the

close of the time, the pupils count the number of pages or lines read, and each writes his name and the amount read on a slip of paper. The slips may easily be arranged in order of the amount read by calling them in in that order. Call upon the pupil who read the smallest amount to reproduce what he read, and supplement his reproduction by criticism and suggestions from the class. As a rule the slow reader will not reproduce well. Intelligent individual-case analysis of the cause of poor silent-reading, with friendly advice, will usually mark a beginning in improvement. Then the next pupil in amount read continues the reproduction, beginning where the other one stopped, and so on through the class.

The following is the showing of a fourth-grade class as to rate in a lesson of this type:

Riverside Fourth Reader. "How a King Was Found"

Time 4 minutes

No. lines read	*No. pupils*
35	1
40–49	2
50–59	3
60–69	2
70–79	2
80–89	4
90–99	4
145	1
Total	19

Note that the fastest reader read four times as much as the slowest reader. An interesting fact revealed to the pupils was that the faster readers knew the first part of the story better than the slower readers. It is evident that the slower readers in this group are in need of special individual and small-group training in silent reading.

The second plan is similar. Choose a rather long unit,

Formulate a question for each paragraph or page. Announce to the pupils that you wish to see how rapidly they can read, and be able to answer questions on what they read. Allow the pupils to read until one or two have completed the unit, and then call "Time." Have each pupil write his name and the number of pages read on a slip of paper. The teacher arranges these slips, or calls them in, in order from the lowest to the highest, and follows this order in asking the questions which she has arranged in the order of the pages. The observation of habits, advice to pupils, and the general impression to be made, are the same as in the preceding plan.

The following is the result as to rate of a fifth-grade class:

Riverside Fifth Reader. "Gerasimus and the Lion"

No. pages read	*No. pupils*
15	1
14–10	3
9–8	5
7–5	6
4	3

In this case, also, the fastest reader read nearly four times as much as the slowest. It is evident that there are three very slow readers in this class who are in need of individual diagnosis and special training.

Timing the pupil's reading. Assign a selection to be read through to the end by all pupils. When the first pupil finishes, he raises his hand and the teacher writes the time on the board. Every five seconds the teacher writes the time upon the board, and as the pupils finish they take the last time on the board as their time. If desired, pupils may calculate their rates in terms of the number of words per minute. Pupils should be given a definite idea of the standard rate for their grade. Each pupil should be encouraged to increase his rate, in so far as possible and still

maintain adequate comprehension. Any exercise in speeding up the rate of reading should be accompanied with some sort of informal check on comprehension, such as reproduction or answering questions.

Time records on reading outside of recitation. A valuable exercise to increase rate is to assign a long unit of easy reading material, to be read during a study period or at home. The pupil records the time it took him to read the unit and reports to the teacher in writing. The comprehension is checked up through the discussion of the unit.

Re-reading for increase of rate. Investigators have found that the re-reading of material aids in forming better eye-movement habits, and therefore tends to increase the individual's rate in reading other similar material. The main problem in this connection is to provide a strong motive for the re-reading, so the second or third reading will be done with spirit and interest. In conducting silent-reading lessons teachers will often find opportunity to have the pupils re-read passages, and should encourage a rapid re-reading when the main purpose for the re-reading is to increase rate.

Skimming. Is it ever advisable to skip in reading? Shall we teach pupils when and how to skim in reading? We hear a great deal about thoroughness in school work. It is well that this should be emphasized under some conditions. But there is a serious question as to whether over-emphasis upon it has not tended to hinder desirable growth in rate of reading. There are various types of silent reading, varying according to the purpose of the reader. We have the careful reading in study and the rapid, recreative reading. Skimming is a type of reading that is legitimate for certain purposes. We may glance over the pages of the newspaper, noting the headings in order to select what we shall read, to find a certain fact, or to determine if there is

anything in the paper about a certain matter. We may look through an article or book, reading a little here and there to get the gist of the book or to determine whether we care to read it or not. Roosevelt is said to have done a great deal of rapid perusal of this type, showing a remarkable ability in getting the kernel of a book in a surprisingly short time. When a pupil has occasion to refer to a reference book for specific data, he should be able to skip irrelevant matter.

All of these types of skimming should be trained for in school; but care should be taken that pupils do not form the habit of skimming as a general practice in their reading. When an exercise in skimming is for the purpose of training the pupil to read much more rapidly, for a certain purpose, there should be a definite check upon how he comprehends in line with that purpose. Otherwise skimming will tend to decrease his comprehension in his ordinary reading.

O'Brien's three types of training for speed. In connection with a study already referred to in Chapters II and IV, Mr. O'Brien discusses the types of training used:[1]

> Three types of training were developed. In Type I practice in rapid, silent reading was made the basic factor; in Type II the stress was placed coördinately upon the decrease of vocalization and practice in rapid, silent reading; while in Type III emphasis was directed upon training in perception by means of short exposure exercises, supplemented with practice in rapid reading. In Type I all the eleven foregoing factors except Nos. 2 and 3 were incorporated; in Type II, all except No. 3; and in Type III, all except No. 2. All three types of training have much in common — the same auxiliary devices, the same technique. They differ chiefly in the factor which has been made the basic one in each method.
>
> *Type I — Training in rapid, silent reading* — will be outlined

[1] O'Brien, John A. "Development of Speed in Silent Reading"; in *Twentieth Yearbook of the National Society for the Study of Education.* Public School Publishing Company, Bloomington, Ill., 1921.

briefly, as it is typical of the general procedure in the other two methods.

The teacher was instructed first to point out to the pupils the advantages of a rapid, effective rate of reading, and to enlist their whole-hearted effort in the attempt to develop such a habit. The method consisted essentially of alternate reading and reproduction. The reading period was broken into several reading stretches, consisting of two, three, or four minutes. During each stretch the pupils were instructed to read as rapidly as possible — consistent, of course, with an understanding of what was read. The periods were made quite brief, in order to evoke the greatest possible speed by an intensity of effort which could not be sustained over a longer period. The idea was to break up the old order of eye-movement habits as quickly as possible, and to build into a habit an ocular-motor reaction of a more advantageous type. The short period safeguarded against fatigue, as well as against a relapse into the customary leisurely reading rate. In short, speed was the dominant note in the entire set of directions.

The amount read was quickly determined and marked. The pupil then reproduced what was read — sometimes by free paraphrase, orally or in writing, and sometimes by answers to specific questions based on the text. The reproduction was usually brief. Its function was merely to show both the teacher and the pupil whether the matter was properly grasped. The aim was to devote about two thirds of the time to actual rapid reading. Interesting, familiar material was preferred. Difficult words were explained beforehand. Whenever thought preparation was deemed necessary, the teacher was instructed to give it briefly. At the end of the total reading period the pupil immediately entered upon the chart his average rate of speed as the record for the day.

2. Plans for improving Comprehension

In all rapid silent reading for the increase of rate there should be some kind of check on comprehension, to make sure that the pupils actually read the material, and to avoid increasing the rate to the serious detriment of comprehension. Likewise, in lessons for the improvement of comprehension, the relation of rate should be kept in mind.

In training in comprehension in rapid reading, timed reading will often be necessary. The difference in the lesson that trains primarily for rate, and the one that trains primarily for comprehension, is a difference of emphasis.

Action sentences and directions. Even in the first grade, pupils should be taught to comprehend sentences without oral reading, and to express the meaning of the sentences in other ways than through oral reading or telling. Sentences that can be acted out, or that contain directions for seat work, are the best to use in the first lessons in silent reading not followed by oral reading.

The following are some sets of such sentences that have been found easily usable:[1]

FOR SILENT READING IN CLASS, WITHOUT ORAL READING

1	2
Hold up your hands.	Run to the east.
Fold your arms.	Run to the west.
Jump on one foot.	Run to the north.
Find something round.	Run to the south.
Find something square.	Clap your hands.
Point to the clock.	Stamp your feet.
Point to the door.	Stand on one foot.
Point to the blackboard.	Snap your fingers.
Point to the window.	Wink your eye.
Give me some chalk.	Shake your head.

DIRECTION SENTENCES FOR SILENT READING IN RELATION TO SEAT WORK

13	14
Write seven words beginning with "c."	Write your name ten times.
Draw six window boxes in two rows.	Write six words ending in "ing."
Draw five circles upon five squares.	Write five words ending with "ask."
	Write five words ending with "atch."

[1] Fourteen such sets, printed on cards 5½"x 7½", may be purchased from the Plymouth Press, 6749 Wentworth Ave., Chicago.

Draw two triangles upon two squares.
Put four letters into four squares.
Cut six oblongs into halves.
Put five numbers into five circles.
Put eight numbers into eight squares.
Draw eight flags in two rows.
Draw nine hats in two rows.
Write your father's name five times.
Write the first half of the alphabet.
Write the last half of the alphabet.
Draw ten gods in two rows.
Draw eight circles in four rows.
Draw nine cats in three rows.

The first two sets are easily used about the middle of the first grade and the last two toward the end of the first grade.

The following are similar sentences, adapted from the *Teacher's Manual* of the *Barnes Primer:*

TO BE READ SILENTLY AND ACTED	TO BE READ ORALLY
Spin the top.	The top spins.
Spin the little top.	The little top spins.
Spin the big top.	The big top spins.
Spin the red top.	The red top spins.

The *Holton Primer* has some very good lessons for silent reading. The following are representative of the types used.[1]

TO BE READ SILENTLY AND ACTED

All play you are rabbits.
Jump. Run.
Eat grass. Eat apples.
Catch the baby rabbits.
All listen to the dog.
Run away, little rabbits; run fast.

Mary may be the mother bear.
Jack may be the father bear.
Frank may be the baby bear.
Nell may be the little girl.
Sit in the chairs, little girl.
Bears, come home.
Taste of your soup.
Baby bear, cry.
Sit in your chairs, bears.
Say what the bears said.
Run after the little girl.
Run home, little girl, run!

[1] Holton, M. Adelaide. *The Holton Primer*, pp. 29, 50. Rand McNally Company.

Unfortunately, as a rule, primary teachers have not used these types of silent-reading lessons found in primers in the way in which the authors intended. Too often they have been used as an ordinary oral-reading lesson. Teachers need to realize the advantage of omitting almost entirely oral reading in connection with these lessons.

Silent reading and reproduction. The simplest type of silent-reading lesson for improving comprehension is the reproduction, oral or written, of a story read silently. The organization of thought rather than memory should be stressed. Comparisons of differing versions help to clarify organization of content. The story read may be reproduced orally or by writing.

The silent reading of the story takes place during the recitation under the observation of the teacher, and with a time limit. The teacher notices the silent-reading habits of the pupils, noting individual cases of pointing with the finger, vocalization, and lip-movement.

1. *Telling the story.* The pupils either tell the story, each pupil being called upon to relate a part or to make corrections, or in the assignment the pupils are told to read a certain story and get it well enough to tell to the class. In the case of one of the more familiar stories, it may be well to ask the pupils to be on the lookout for variations in detail from the version they have heard before. The recitation consists in the telling of the story, questions, and discussion. The relation of good reading habits to comprehension is commented on during the reproduction.

2. *Written reproduction.* During study-time the pupils read the story, place the books in the desk, and then write the story. The recitation consists in the reading of the written stories, with comments. While there are individual exceptions, the number of words reproduced, counting out erroneous expressions, is a fairly good index of comprehension.

Three main forms of comprehension reading. In training pupils for comprehension of what is read, teachers will use three main types of reading matter, and with somewhat different ends in view. The aim of the first type will be to enable the pupils to answer factual questions, that of the second type to answer relational or problem questions, and that of the third type to train pupils in comprehending the organization of the selection. We will next consider each of these types, in the order named, and under the subheads *A*, *B*, and *C*.

A. Reading to answer factual questions

As a general rule factual questions are in disfavor, and properly so. Yet an occasional spirited exercise in factual comprehension is helpful as a check on ability to get details. It is a quick, effective means of stimulating competition in grasping the facts of a selection. It trains in one type of comprehension, and should not be permitted to displace exercises in more rational and critical silent reading.

In connection with the cumulative story. Here the reading is done in recitation, by sections. The teacher explains to the pupil that the purpose of the reading is to find the answer to questions quickly. The teacher asks the question before the section is read. As soon as a pupil has read the section and can answer the question, he stands. This speeds up the slow reader. The question should call for some specific fact. What happens in the next section? What is the next animal that comes into the story? The cumulative story and the fable are adapted to this plan of rapid reading for facts. At the end of the exercise, the story as a whole should be reviewed.

In connection with informational material. The need of training in the comprehension of facts is illustrated by the

answers which Thorndike reports [1] were given in answer to his tests on the understanding of sentences. The following is one section of his test:

A

Read this and write the answers to 1, 2, 3, 4, 5, 6, 7, and 8. Read it again as often as you need to.

Tom gave a gray cat to Mary. She gave him a black dog.

1. What did Tom give the girl?
2. What did the girl give Tom?
3. What was the girl's name?
4. What color was the dog?
5. What color was the cat?
6. Was the dog the same color as the cat?
7. Did Mary give Tom anything?
8. Who gave the cat to Mary?

The following absurd or nonsense answers were among the responses of the third and fourth grades:

1. What did Tom give the girl?
   Tom gave the girl a skate
   a new hat
5. What was the color of the cat?
   gray and white
   the cat
   said Mary
   What color was the cat?
7. Did Mary give Tom anything?
   she gave him a chicer bord.
   Tom anything.

The following is another section of the test:

B

Read this and then write the answers to 1, 2, 3, 4, and 5. Read it again as often as you need to.

Nearly fifteen thousand of the city's workers joined in the parade on September seventh, and passed before two hundred

[1] Thorndike, Edward L. "The Understanding of Sentences"; in *Elementary School Journal* (October, 1917), vol. 18, pp. 98–114.

thousand cheering spectators. There were workers of both sexes in the parade, though the men far outnumbered the women.

Question 2. Which sex was in the majority?

The following are some answers reported from the fifth, sixth, and seventh grades:

The fifteen thousand	Seventh
Workers	Two hundred spectators
Workers of sex in the parade	Spectators and working
Workers were in the majority	Sixes
In the parade	Men and women
Both in the parade	Far out women
Sexes in the parade	Sexes of women

An experiment in factual comprehension. An interesting experiment was carried on by the writer in connection with factual comprehension with a sixth-grade group. The pupils were asked to read a selection from *Chatty Readings in Elementary Science*, Book 3, entitled, "The Little Spinner and Weaver." Then they were given ten factual questions to answer without referring to the book. One of the questions was, "Where are cobwebs in their proper place?" The reading specifically stated that cobwebs were in their proper place in the garden. The following are the answers given:

No. pupils	*Answers*	*No. pupils*	*Answers*
18.	In the garden	1.	corner
7.	(No attempt made)	1.	in corners
2.	Garden	1.	between loges
2.	In the corner	1.	in a whole in the ground
1.	gardens trees	1.	in corners in the house
1.	houses	1.	on neighboring leaves
1.	in trees	1	At the end of the web
1.	in a tree	1	in dark places
1.	feild		

Total, 42 pupils; correct, 18.

Some of these answers can be explained in terms of over-

potency of certain words occurring in the reading, but some cannot. There was no mention of *tree*, for instance. Some answered from their knowledge or experience. Several answers are clearly incorrect, when measured either from knowledge in the reading or out of it. The seven who knew that they did not know should probably have some credit over those whose answers were absurd or unintelligent. The important observation is that less than half of the pupils answered this simple factual question correctly.

Exercises in reading and answering factual questions may be conducted by having pupils read and record the answers during study-time, and then have the answers compared and checked up during recitation. Another plan would be to have the pupils read the material silently in recitation, and then write the answers without the text in hand. We have plenty of evidence that both types are needed. The question naturally arises, Will it be interesting to the pupils or will it be monotonous? This all depends upon the skill of the teacher in selecting material, formulating the questions, and utilizing competition and interest in achievement.

B. Reading to answer relational or problem questions

Training in relational thinking. For the purely factual question, the answer is given specifically in the reading matter and practically in the words of the questions. This, of course, is the simplest type of question, and the one easiest for the child to answer. To be a real problem-question some relational thinking must be required, and it should not be possible to answer in the exact language of reading matter unless the question asks for the selection of a group of words from the text in application to a condition not given in the text. The following is an example of an

exercise, used with sixth and seventh grades, for training for relational thinking in silent reading:

THE LITTLE SPINNER AND WEAVER

Chatty Readings in Elementary Science, Book 3, p. 64

Assignment: First read the whole selection through rapidly. Then read the part indicated before the question, and write the answer if you can. If necessary to re-read, in order to answer the question, do so. After you have written your answer verify it; that is, re-read to see if it is correct. In case you think what you have written is not correct, do not erase it, but put a large question mark at the left-hand margin. The questions should be answered in your own words, and not by copying sentences from the book.

Paragraphs 1 and 2. Give two reasons why a spider is not an insect.

1.

2.

Par. 3. Why do spiders spin webs?

On this rough outline drawing of a spider's body put an X where the spinnerets are located.

Par. 4. Give two reasons why the cord fastens where it drops.

1.

2.

Par. 5. Give two reasons why the web is not easily destroyed by the wind.

1.

2.

Par. 6. How are spiders beneficial to the garden?

Par. 7. Why does a spider lurk under a leaf near the web?

Paragraphs 1–7. Prove that we must use *spinner* and *weaver* both in order to describe fully what the spider does.

Proper statement of relational questions. A good relational question will be stated clearly, and will call for a definite answer. A poor question is frequently misinterpreted. The question should also be on a level with the reasoning ability of the pupils of the class. The last question of the above exercise was misinterpreted by a number of pupils, was answered correctly by only a very few seventh-grade pupils, and by none of the sixth-grade class.

This indicates that the question was certainly too difficult in form and required too complex a type of relational thinking and organizing for the sixth grade. Experience with the exercise proved that the other questions were worded so clearly and so definitely that there was little excuse for misinterpreting them.

During the recitation following the study period upon the exercise, the questions were taken up one at a time and answers from a number of pupils read. These responses were discussed, and a correct one agreed upon. Then there was a show of hands to see who recorded the correct answer during the study. As this was a training exercise and not a test, there was no attempt to put a score, or grade, upon the pupils' work. Pupils having answers showing poor thinking were asked if they carried out the step of verification as given in the assignment. Rarely had this been done. The importance of checking up their answers was, of course, emphasized, and the example of some of the better readers who had done this was tactfully made prominent, as a means of getting all in the habit of verifying answers in careful reading or study.

Considering meanings of words. The sources of error may be summarized as relating to vocabulary, to method in study, and to inability to do relational thinking. The discussion of several words came up in connection with vocabulary errors. One pupil had taken *elastic* to mean *everlasting.* In connection with the exercise requiring the placing of an X on the drawing to locate the spinnerets, a number of pupils did not understand *abdomen,* and a good many failed to get the significance of the expression, " end of the abdomen," as used in the text. The meanings of words were considered in this lesson in relation to the thought under discussion, rather than in an isolated reciting of definitions which is so common.

Verifying answers by careful re-reading. The failure of many pupils to verify their answers has already been mentioned. Monroe stresses the importance of attention to this step in his chapter on "Correcting Defects in Reading."[1] He says that exercises of this type will give pupils an idea of what careful reading involves, and their attention will be directed to the necessity of verifying their answers. Thorndike says,[2] in this connection:

> There are two contrasting forms of defective procedure used by children in these tests. The first is to examine the paragraph until some word is found which does not appear unsuitable, and to use that as the answer. . . . The second is to accept anything from within or without the paragraph which comes to mind without reëxamining the paragraph at all closely. . . . This fishing around in the text for something to use and its use without reorganization is perhaps the most debased form of reasoning — selective thinking — which school work shows. Many educational theorists will, indeed, deny that it is reasoning. It certainly is a very inadequate form; and the extent to which it prevails among pupils even in the higher grades shows the need for practice in reading and study. I am inclined to think, however, that the cure for it is not to repress the *verbatim* use of wrong, irrelevant, or roughly appropriate quotations, but to permit it, *plus careful examination of the quotations to see if they really do meet the need.*

Improving the ability to think logically in reading and study. Some pupils show poor ability in rational thinking by failing to distinguish between a vague general reason loosely related to the problem, and a specific reason that gives a definite fact in relation to the conditions of the problem. Note the vague general reason in contrast to a good specific reason in answer to one of the questions of the exercise described on page 174.

[1] Monroe, Walter S. *Measuring the Results of Teaching.* Houghton Mifflin Company.

[2] *Elementary School Journal* (October, 1917), vol. 18, pp. 110, 112

Give two reasons why the web is not easily destroyed by the wind.

1. It is elastic.
2. It is not only one line but a vast number. (Vague.)

An answer with both points definite:

1. It is elastic, and can't be easily broken by the wind.
2. It is built of strong cords.

A number of pupils failed to realize that two phases of one reason were not two reasons. This is illustrated in the answers to the first exercise:

Paragraphs 1 and 2. Give two reasons why a spider is not an insect.

Correct answer: 1. A spider has eight legs and an insect six.
2. A spider is born a spider, while an insect is hatched from an egg and changes its form several times in its life.

Answers given in which one reason is mistaken for two:

Pupil A: 1. A spider has eight legs.
2. An insect has six.

Pupil B: 1. A spider is born a spider.
2. An insect is hatched from an egg.

It is important to train pupils to distinguish between a vague general reason and the statement of a specific fact in terms of the problem, and to distinguish statements that give a part of a reason, a complete point, and two or three complete points.

Other difficulties that pupils have in relational comprehension are:

(*a*) Failure to keep in mind the problem or point wanted.

(*b*) Failure in being able to select significant words or phrases.

(*c*) Inability to reject quickly and skip irrelevant matter.

A training exercise using the geography. The following

exercise was devised and used by Miss Emily White, with a sixth-grade class:

SILENT-READING LESSON IN GEOGRAPHY

Material: Essentials of Geography, Book II, pp. 164–66.

Assignment: First read the material through rather rapidly. Then read to find the answer to the first question. After recording the answer, re-read the section to make sure the answer is correct. In case you are not sure that the answer is right, put a question mark in front of the answer. The answers are to be facts taken from the text, and stated in your own words so as to apply to the question. Answers based upon your previous knowledge or experience, the facts of which are not given in the text, will not be correct. Each question can be answered in one sentence, except the one requiring a drawing.

Sec. 227: What is the difference between the way moisture is supplied for farming in the Plateau States and the way it is supplied in the eastern part of the United States?

Helps: Select one word or phrase that tells how the crops are watered in the East. Select one word that tells how the crops are watered in the Plateau States. Write a sentence containing the two which will answer the question.

Sec. 228: Why did irrigation begin in Utah?

Sec. 229: Draw a rough sketch of an irrigation system and label with words given in the text.

At first each farmer provided his own ditch direct from the stream. What led to the need of coöperation through companies for building irrigation systems?

List two sources of water for irrigation.

Sec. 230: Why is "The Reclamation Service" a good name for the department of the United States that helps with irrigation?

Why is a dam built?

In how many States is there land reclaimed through irrigation projects? (This question tested the resourcefulness of the pupils in consulting a map embodied in the text, and referred to.)

How does building a dam for irrigation sometimes promote manufacturing?

A silent-reading exercise with a history text. In a departmental organization the teachers of the content subjects need to coöperate in training for silent reading. The reading teacher, the history teacher,[1] the geography teacher, the language and grammar teacher, and to some extent the arithmetic teacher, should all assume some of the responsibility for specific training with comprehension exercises. The following is an exercise used by an eighth-grade history teacher, Miss Ada E. Plass:

TEST IN HISTORY

Beard and Bagley — *History of the American People*, pp. 549–54.

The Results of the War; American's New Interest in the Orient

P. 549: 1. What was the chief objection advanced against holding the Philippines?

2. What great advantage for the United States in possessing the Islands?

P. 550: 1. Reading the map on page 550, state:

a. The direction Japan is from the Philippines.

b. The direction of the Philippines from the place of the Boxer uprising.

P. 551: 1. Select a group of words from the text that express the feeling that caused the Boxer uprising.

2. What right did the Filipinos have to expect independence?

P. 552: 1. What is the meaning of the cartoon on page 552, with reference to the intentions of the nations in sending soldiers into China?

2. Why is this cartoon not correct with reference to the United States?

3. Why were there so many Chinese students in the United States after the Boxer uprising?

P. 552–553: 1. What was the chief political issue in 1900?

2. State the main difference between the position of the Democrats and of the Republicans as to the Philippines in 1900.

[1] The *Barr Diagnostic Test in American History*, published by the Public School Publishing Company, of Bloomington, Ill., has some very interesting and valuable exercises for training in the comprehension of historical reading.

P. 554: 1. Prove that the Democratic administration in 1913–17 maintained the same position with reference to the Philippines as the Democrats did in 1900.
2. What right was granted to Porto Rico that was not granted to the Philippines?

In formulating an exercise of this kind, it should be kept constantly in mind that the purpose is for training in comprehension in reading, and all the questions should specifically involve selecting, reorganizing, or applying data in the reading-content, rather than from the pupil's fund of general information. While questions calling for criticisms, experiences, etc., would be appropriate under some conditions, they would be out of place in a training exercise involving silent reading. The success of an exercise of this type will depend upon the skill of the teacher in making the questions and in keeping the attention of the pupils, during the study and the recitation, directed to the content of the reading text. The method of the pupil's study should be scrutinized, as revealed in the recitation, and helpful suggestions made to aid him to substitute good habits of attack for poor ones.

Substituting silent for oral reading in grammar exercises. In exercises in grammar, the usual practice is to have a pupil read the exercise orally while the remainder of the class reads it silently, and at the same rate. From the standpoint of training in silent-reading rate it is much better to have all the pupils read the exercise silently, make any interpretations or explanations asked for by pupils, and then ask the pupils to rise as soon as they are able to carry out the directions of the exercise. What is meant may be made clearer through the use of an exercise chosen from a text on English.

ORAL EXERCISE IN ENGLISH

Point out the essential parts of the following sentences, and name the modifiers of each part. Tell what kind of modifier each is.

[Previous work in the chapter had listed the essential parts as follows:]

1. Principal word of the subject.
2. The verb.
3. The predicate word, if there is one.
4. The object, if there is one.

The modifiers treated in the chapter are adjectives, adjective phrases, adjective clauses, adverbs, adverb phrases, and adverb clauses.

The usual plan of having the directions read orally is a waste of time, slows down the silent reading to the articulation rate, and hinders concentration of attention to the thought. Experiments have shown that pupils comprehend better in silent reading than in oral reading. Evidently " essential parts " and " kinds of modifiers " are the expressions that need interpretation. As a beginning it will be advisable to have each pupil write down what these expressions mean to him. After the meaning is clear, the teacher may ask the pupils to stand as they are able to recite upon the first sentence. This tends to speed up the slow ones. The pupil's recitation does not need to begin with an oral reading of the sentence, as is so common. The pupils have all read it silently; what can be the purpose of reading it aloud? Following the pupil's recitation upon the first sentence, comprehension of the directions may be tested by asking the pupils to point out any omissions made with reference to the different points in the directions. Every opportunity of this kind, in any subject, to train in comprehension in silent reading should be utilized. There should be no oral reading unless there is a very definite reason for it.

C. Training in comprehension of the organization of what is read

One cause of failure in adequate understanding in reading is in not comprehending the organization of the text.

Many times pupils do not understand the plan of headings and subheadings. In the reading instruction there should be exercises in outlining, and in selecting the central thought, leading ideas, key sentences, appropriate topical headings for paragraphs or divisions, and significant or climax paragraphs or chapters. Several types of exercises are adapted to aiding pupils to give more attention to the organization of the content.

Summing up paragraphs of exposition in study recitation. Begin the recitation by having all the pupils read the unit through rather rapidly to get the general theme. Then ask the class to decide upon a suitable topic for each paragraph. The class then reads the first paragraph silently and works out the topic, and so on through the unit. See if the topic does or does not continue over into the next paragraph. Discover the sentences that are most significant. There should be some reading lessons of this sort in every term's work in the fourth and fifth grades. Some bright third-grade classes may be able to make a beginning. The teacher will need to use skill in selecting suitable easy material for this, and in making a preliminary outline herself. The following is a part of a fourth-grade lesson:

A Fourth-Grade Lesson

"The Beaver" — *Baldwin Fourth Reader.*

1. Description: Content summary: length — weight — color — tail?
2. Characteristics: kind — neighborly — helpful — wise.

It will be noted that the words in (2) give the facts, while the words in (1) give only the nature of the facts and not the facts themselves. The greater extent to which the units can be indicated and the outline be kept concise and brief, the better the result.

The necessity of distinguishing between leading ideas and

subordinate ones makes outlining difficult for immature students. The lower the grade the more important it is to select material that easily outlines, and the simpler should be the outline. Until pupils have some facility in comprehending the organization of units, it is best to use selections in which each paragraph has a clearly outstanding idea. The following outline was worked out in class in the lower fifth-grade:

"Uncle Sam as Flag-Maker" — *Natural Method Fourth Reader.*

Paragraph	*Topic*
1.	A fleet of Uncle Sam's warships
2.	The dreadnoughts
3.	A display of flags on the warships
4.	Uncle Sam the big flag-maker
5.	Seeing the flags made
6.	Very many flags needed for decoration and signaling
7.	Some are elaborate — The President's
8.	Changes in the flag since 1777
9.	The trouble and expense when a new state is admitted
10.	Flags vary greatly in size
11.	The best material is used
12.	Two things to think about when we see the flag

Making a topical outline of a selection. The *Teacher's Manual* for *The Boys' and Girls' Readers* for the Fourth and Fifth Grades, by Bolenius, provides definitely for lessons that train the pupil to see the organization of a selection. The following is taken from the *Manual:*

"The Fish I Did n't Catch" — Whittier — *Fifth Reader.*

This selection falls into nine logical divisions, each of which has a leading thought. It therefore offers good material for training your pupils to sum up a paragraph in a few words. A good plan of procedure is to have the pupils read through the paragraph or section, and when through it close the book and try to sum it up in a few words. The teacher should call for these various attempts, and have the children select the best to record on the blackboard.

After a topic is written on the board, the class should be directed to open books and read the next section.

Paragraph	*Topic*
1.	Description of the surroundings of the homestead
2.	Why the settlers prize these meadows
3.	Whittier's hatred of snakes
4.	The beauties of the meadow
5.	The attractions of the brook
6.	Whittier's chief reason for liking the brook
7.	A fishing excursion
8.	First sorrows and the uncle's advice
9.	Whittier's feeling about this lesson

An excellent unit for beginning training in making topics for paragraphs is the following:

"The Milky Way" — *The Merrill Fourth Reader.*

Paragraph	*Topic*
1.	A broad path of misty light
2.	Composed of thousands of stars
3.	What the Greeks thought
4.	What the Norsemen thought
5.	What the Indians thought
6.	The description in *Hiawatha*
7.	Jacob's Road
8.	In all the stories, the Milky Way is the path from earth to heaven

Grouping paragraphs. Training in grouping paragraphs together under headings represents a further advance in the study of organization. The following selection, taken from the *Teacher's Manual* for the *Sixth Reader*, by Bolenius, illustrates this work well:

"The Boyhood of a Naturalist" — John Muir.

This selection offers splendid training in grouping paragraphs together under heads. It will pay to build up on the board an outline by paragraphs, and then reconstruct the outline somewhat as follows. Thus the pupils see for themselves how an author thinks in large measure.

Sections 1– 5. Entrance into the wilderness
6–20. Different kinds of birds
21. The frogs
22–25. Snakes
26–27. Insects
28–32. Fishes
33. The Lake
34–40. Learning to swim

An eighth-grade lesson in outlining. The following account of an eighth-grade lesson illustrates the facility with which an upper-grade class grasps the leading ideas in a selection. The following outline was formulated as a guide for the teacher:

Castlewood, England — 1691. From *Henry Esmond, Baldwin Eighth Reader*, pp. 145–48.

I. The meeting of the Viscountess and Henry Esmond (Par. 1–4.)
   1. The lad of twelve. Sad. Studious. (Par. 1.)
   2. A kind greeting. (Par. 2.)
   3. The charming Viscountess. (Par. 3.)
   4. Henry impressed by her tenderness and kindness. (Par. 4.)

II. The meeting of Henry with the Viscount and Beatrix. (Par. 5–9.)
   1. The Viscount laughs at Henry's adoration for the Viscountess. (Par. 5.)
   2. The Viscount welcomes Henry. (Par. 6.)
   3. The Viscount laughs when told that Henry had been saying his prayers. (Par. 7.)
   4. Beatrix greets Henry kindly and Henry is grateful. (Par. 8.)

III. Description of Castlewood Surroundings. (Par. 9–10.)
   1. The sunset scene. (Par. 9.)
   2. The Viscount's appreciation. (Par. 10.)

IV. The Next Day. (Par. 11–13.)
   1. Henry's anxiety about the continuation of the welcome. (Par. 11.)
   2. The kindly greeting of Henry by the Viscount and Beatrix. (Par. 12.)
   3. The pleasant conversation. (Par. 13.)

The following was the assignment given by the teacher preliminary to the study by the pupils:

1. Read through the selection rather rapidly.
2. Re-read, considering the dominating characteristics of the pictures, and list words that express these.
3. Divide the whole into four main divisions, and formulate a heading, choosing words that effectively express the main idea of the paragraph.

In recitation the words listed were first considered, and then, the pupils having their outlines in hand and with the teacher leading and directing, agreed upon the four main divisions and the headings, which were placed upon the blackboard. Then the pupils were asked to fill in a topic for each paragraph in each division, again choosing words that adequately expressed the essential idea of the paragraph. After this was completed, the outline on the blackboard was completed. The class outline, as given below, shows the final wording of the outline. The outline is the product of the coöperative efforts of the class. The teacher stimulated thinking by criticisms and questions, but the outline in its organization and wording represents the combined contributions of the pupils.

I. The meeting of the Viscountess and Henry. (Par. 1–4.)
   1. Characterization of Henry Esmond. (Par. 1.)
   2. The kind greetings of the Lady of Castlewood. (Par. 2.)
   3. Description of the charming Viscountess. (Par. 3.)
   4. Henry's expression of admiration for the Viscountess. (Par. 4.)

II. The meeting of Henry with the Viscount and Beatrix. (Par. 5–8.)
   1. The amusement of the Viscount at the adorer of the Viscountess. (Par. 5.)
   2. The Viscount's welcome of Henry. (Par. 6.)
   3. Beatrix's expression of surprise at Henry's position. (Par. 7.)
   4. Henry's gratitude. (Par. 8.)

III. The beautiful scene as viewed from the garden. (Par. 9–10.)
   1. The sunset scene beyond Castlewood. (Par. 9.)
   2. The Viscount's expression of pleasure at the beauty of Castlewood. (Par. 10.)

IV. The next day. (Par. 11–13.)
   1. Henry's fear that the welcome may not last. (Par. 11.)
   2. The same kind greetings. (Par. 12.)
   3. Henry's promise to teach the Viscountess French. (Par. 13.)

Making running notes. Training pupils in the making of running notes on what is read is another form of training in the comprehension of literary organization.

The following illustrative exercise is taken from the *Teacher's Manual* of the *Boys' and Girls' Sixth Reader*, by Bolenius:

"How the Trolley Car Runs" — Eva March Tappan

Running notes of a selection to serve as clues of content. This selection is packed full of thought. The following running notes will help to show what is played up in the article.

¶ 1. Why the marble rolls and stops — two things that happen
¶ 2. How to move cars — what electricity travels through — insulation — example, lightning rods — a circuit — free — closed
¶ 3. The generator — power house — how it drives the cars — closed — broken circuit
¶ 4. Care in laying rails to prevent jumping of electricity
¶ 5. The motorman's work — speed — brakes — skidding wheels — sand
¶ 6. How the car is heated — why it does not catch on fire
¶ 7. What the *trolley* is — how made and used
¶ 8. How wires may be placed — underground — overhead — conduits
¶¶ 9–11. Electric locomotives — third rail — loose wires — advantages of steam over electricity — storage battery not yet perfected — trial of running cars without rails — why the overhead trolley is preferred
¶¶ 12–13. What the trolley does for the country — example, peach farm — speed in reaching markets — less expense — how it helps the steam road
¶ 14. How the trolley helps the workman — in congested districts — Great Britain, Belgium, and Cleveland
Ancient idea of the city and the trolley

Topical outline versus running notes. In connection with this selection there is excellent opportunity to show the pupils the difference between a topical outline arranged with main points and sub-points, and mere running notes like those given on this page.

Making and matching paragraph headings; group work. In this work the class is divided into two or more teams. Each team is given a short selection containing good paragraph organization. Each member of the team reads the selection, and makes as many paragraph headings as possible in a given time. In team conference the best heading for each paragraph is selected. These selected headings are arranged promiscuously, and given with the books to another team. Each member of the receiving team matches the headings as best he can in a limited time. The members of the team agree in conference upon the best matchings. The team that made the headings checks the matchings of the other team. A comparison is made of the percentage of correct matchings made by each team.

Training in reading headings in texts and newspapers. Consult almost any text in history or geography and you will find a definite scheme of printing to show headings for the chapter, for a few large parts of the chapter, for sections of these parts, and for paragraphs under these. In beginning the use of a new text, the teacher should use the time of a period or two to familiarize the pupils with the scheme of headings used. Show the pupils the scheme in the first chapter. Then see if they can copy it in the form of an outline. Pupils should be led to give more attention to these headings in their study. This can be done by the teacher giving more reference to them in her questions and other details of her teaching. Pupils may be asked to compare the organization in one text with that in another, or to make substitute headings for those in a text.

Pupils should also be taught the organization of material in newspapers. Their attention should be called to the division into sections, such as news, sports, editorials, etc. The purpose of the use of different sizes of type should be taught. In a newspaper story the title is printed in a heavy black *headline;* below the headline is given a brief summary of the story. This is called the *lead.* It is printed in letters smaller than the headline, but usually larger than the rest of the story. Frequently *sub-titles* are scattered throughout an article to serve as guide-posts, or to bring out exciting things in the story.

The following are good exercises of this type to set for pupils:

(*a*) Bring to the class a newspaper, and be ready to point out headlines and leads.
(*b*) Read a short newspaper article to the class, and ask them to make up headlines and leads.

Analyzing short and long narrative units. While short units of exposition have the most easily conceived paragraph organization, the narrative has the advantage of a sequence of incidents arranged just as they happened. While the teacher should keep in mind the danger of too much attention to structure in developing appreciation, some attention to organization will help to develop a sense for the best. In the upper grades, the pupils may be taught to divide the story according to the following outline:

I. Introduction
II. Development of the plot
III. The Climax
IV. The Outcome

The pupils may be asked to select the climax chapter of books read both as class reading and as individual reading. Pupils may be asked to select and read to the class begin-

nings of stories that especially arouse an interest in reading the story.

A very good outline of *Rip Van Winkle* is given in the chapter on "Synopses," in *Reading in the Public School*, by Briggs and Coffman. Bolenius, in her *Teacher's Manual* for the *Fifth Reader*, gives the following outline of a story:

"How the Cliffers Won" — Samuel Merwin
Vital parts of the story
Sections 1– 2. Rivalry between the Town and Cliff Schools
Sections 3– 8. Ole Anderson and the challenge
3– 4. His proposition to the Cliff boys
5– 6. The rules for the game
7– 8. The challenge and acceptance
Sections 9–14. The first run
9. The Cliffers in training
10–11. Getting the lay of the land
12–14. Winning the first race
Sections 15–29. The second run
15–16. Preparations of both sides
17. The start
18–21. Laying false scents
22. Resting at the monastery
23–24. Laying another false scent
24–25. Ole and Joe over the cliff
26–27. The run home
28. The Cliff School declared winners
29. Return of the hounds one hour and six minutes later
Section 30. The Towners' challenge for next year

The teacher may help to develop a sense on the part of the pupils for the vital parts of a story by making an outline like the one above and asking the pupils to divide the story into sections to fit the outline, or she may give the pupils the sections and ask them to work out the headings. Pupils may be asked to find and report important turning-points in long narrative units. In the case of units suited for dramatization, they may be asked to reorganize the

story in dramatic outline, giving the acts and scenes, the synopsis of each, and the list of characters in order of importance.

Training in quickly grasping the central thought or the essential total meaning of a unit. In various phases of the reading work, pupils are, of course, getting experience in this element of comprehension. But special exercises under a time limit are needed. A good exercise of this kind is to assign the pupils a number of paragraphs, each undoubtedly containing a topical sentence, and ask each pupil to indicate as many topical sentences as possible in a given time. A plan similar to that suggested under "Making and matching paragraph headings" could be used.

Other means by which the pupil may quickly indicate the essential total meaning of the unit may be employed. Monroe has used the following in his reading tests:

1. The western part of the United States was not settled till much later than the eastern. The discovery of gold quickly drew many settlers to California; and, as the search for the precious metal was carried farther, the entire West soon became explored and settled.

   Draw a line under the one word in the paragraph above that tells what it was that caused the western part of the United States to be settled.

2. In order to live in Holland the people have built dikes, to keep the sea out, and have dug canals to drain the land. The water that collects inside the dikes is pumped out by windmills.

   Draw a line under the word below that which most nearly describes the land in Holland.

   mountainous low desert high

3. Aladdin's uncle said: "I will take a shop and furnish it for you." Aladdin was delighted with the idea, for he thought

there was very little work in keeping a shop. He liked that better than anything else.

Draw a line under the word below that tells us what kind of a boy Aladdin was.

industrious ambitious active lazy honest

4. The soldier crawled out of the trench, where he had spent the night. He was covered with mud from head to foot, and almost frozen. He looked around at his companions. What a miserable lot they were! This, then, was the glorious war told about in the papers.

Draw a line under the word below that tells how the soldier felt.

happy patriotic brave angry downhearted

5. Not far from Greensburg is a little valley, among the high hills. A small brook glides through it, with just murmur enough to lull one to repose; and the occasional whistle of a quail, or tapping of a woodpecker, is almost the only sound that ever breaks in upon the uniform tranquillity.

What kind of a picture do you get from reading the above paragraph?

disorder activity noise calmness confusion

6. A silly young cricket, accustomed to sing
Through the warm sunny months of gay summer and spring,
Began to complain, when he found that at home
His cupboard was empty, and winter had come.

Draw a line under the word which best describes the cricket.

wise faithful foolish proud prudent

7. The boy stood on the burning deck,
Whence all but him had fled;
The flame that lit the battle's wreck,
Shone round him o'er the dead;
Yet beautiful and bright he stood,
As born to rule the storm.

Draw a line under the word that best describes the boy.

cowardly mischievous brave young good

8. Nowhere in the world do the children have so many good times as in Japan. They are allowed to play anywhere, and there are all sorts of toys and games for their amusement.

Are the children of Japan happy? Answer with "Yes" or "No."

3. Plans for Vocabulary Training

How we enlarge our vocabulary. It cannot be too often or too thoroughly emphasized that there should be very little centering of attention upon words in the reading for isolated definition. It has been repeatedly pointed out that there is altogether too much of this in the usual school practice. Still the problem remains that pupils are not able to pronounce words, and do not have an adequate conception of the meaning of words. This problem must be solved upon the basis of how we acquire correct pronunciation and adequate meanings of words. How does our vocabulary grow? We all know that our vocabulary develops through experience, and not through the use of the dictionary or the formal recitation of definitions. Every new activity we enter upon enlarges our vocabulary. When one learns to play golf or to drive an automobile, a whole new set of words is required. We learn to pronounce them and to understand their meaning through conversation and reading. One of the fundamentals of reading-vocabulary growth is an extensive vicarious experience through reading. We fully comprehend a word only when we have experienced it in varied contextual relations.

The importance of oral reading in vocabulary development is often stressed. In the absence of scientific studies in this particular we must fall back upon opinion. All will agree that oral reading is a large factor, in the first few grades, in the growth of the pupils' sight-reading vocabulary. But, when a pupil can read his known auditory vocabulary,

there is serious question whether oral reading continues to be an important factor in increasing his sight-reading vocabulary, his speaking vocabulary, or his written vocabulary. Language work, discussion and interpretation, and conversation are better motivated situations for checking pronunciation than oral reading, except real audience reading. In the main, persons come to use words through hearing them in conversation and discussion, and then feeling a need for them in expressing thoughts and experiences.

This treatment, though, is concerned chiefly with the growth of the pupil's reading vocabulary, and as silent reading is much more important to this end than oral reading, it is more concerned with the growth of an adequate *meaning vocabulary.* The following is a summary of the principal activities previously discussed which aid in the growth of the sight vocabulary.

ACTIVITIES AIDING THE GROWTH OF THE SIGHT VOCABULARY

1. Oral reading in the lower grades
2. Audience reading
3. An extensive vicarious experience through reading
4. Interpretative discussion, naturally involving the oral use of many words in the text
5. Special interpretative problems requiring the selecting, comparing, and contrasting of words in the text
6. Systematic lessons in the analysis of word meanings and in the use of appropriate helps, given in periods separate from the regular reading lessons

The last two of the above-mentioned activities will be discussed more in detail.

Vocabulary-problem lessons. In the assignment of a reading lesson, wherever it can be readily done, the teacher should include a problem or exercise requiring the pupil to list a definite number of words, not for isolated defining,

but as an aid in interpretation. From among the suggestive problems and exercises on pages 143–147, select those that require the listing of words.

Some selections lend themselves to the use of a vocabulary problem as the main one in the assignment. The following is a brief account of two lessons of this type.

I. A Vocabulary Lesson on "The Bells," by Poe—Seventh Grade

After the teacher had read the poem as a whole to the pupils, to give them an auditory perspective impression, the more analytical study by parts was undertaken. The teacher announced that the poem would be attacked by determining the four kinds of bells described, and listing under each the words that were used to express the particular effect desired. The following lists were placed upon the blackboard during the recitation:

Sledge Bells	*Wedding Bells*	*Alarm Bells*	*Tolling Bells*
merriment	mellow	shriek	groaning
silver	molten	scream	Runic
tinkle	golden	clash	melancholy
jingling	liquid ditty	clang	throbbing
crystalline	voluminary	roar	muffled monotone
tintinnabulation	rhyming	turbulent	sobbing
	chiming	desperate	moaning
	euphony	twanging	rolling
		palpitating	tolling
		clamorous, etc.	

The pupils selected and discussed these words in relation to a specific interpretative purpose. It is under reading situations of this type that discussing and defining words have value. For the assignment for the succeeding study and recitation the teacher checked ten of the more unfamiliar words, and wrote the following on the blackboard:

1. Find as many synonyms as possible for each word.
2. Check the one whose meaning is nearest to the word.
3. Prove that the word that Poe has used is more appropriate than any of the synonyms would have been.

During the next recitation the following was placed upon the board as the consensus of the opinion of the class:

crystalline	*clamorous*	*voluminously*	*molten*	*euphony*
pure	*noisy	*swelling	*melted	pleasing sound
*clear	loud	large	fused	sweet sound
transparent		copious	cast	*harmonious
palpitating	*melancholy*	*monody*	*solemn*	*monotone*
fluttering	despondent	funeral song	grave	*one tone
*throbbing	sad	*lamentations	*serious	continuous
quivering	*mournful		sacred	utterance
pulsating	dejected		impressive	not varied
	sorrowful		ceremonious	

Another vocabulary lesson will illustrate further what may be done.

II. A Sixth-Grade Vocabulary-Problem Lesson

"The Chimæra" — Hawthorne's *Wonder-Book*

Problem: Select and list expressions that mean the same as Pegasus, and prove that each is appropriate.

Solution: winged horse; snow-white steed; wondrous spectacle; horse fowl; marvelous horse; aerial wonder; splendid bird; beautiful friend; sky-skimmer.

The selection and discussion of these was a valuable means of testing the pupils' silent reading, an interesting way to clear up hazy ideas of meaning, and proved a valuable means of interpreting. This is a good illustration of attacking the content in a psychological though miscellaneous order instead of in the order presented in the story. The lesson ended by relating the story.

Systematic word study. Systematic word study presents a common vocabulary problem for reading, spelling, and language. There is opportunity here for correlation. No

doubt some of the reading-program time should be devoted to definite word study growing out of experience with words causing difficulty in the reading texts. The most suggestive material along this line as yet published is the following extract from Judd's monograph on *Reading: Its Nature and Development*, in the chapter on "Some Experiments in Training Pupils":

Before the work had progressed very far it became apparent that definite word study was necessary in order to build up a background of meaning. Words were studied in the context for meaning, and certain ones were chosen for detailed analysis of prefix, suffix, and stem. A stem word analyzed in this manner became the nucleus for grouping together other closely related words more or less familiar to the student. The word *traction* encountered in an article on the "Lincoln Highway" brought out a discussion of traction engines, their use in plowing, road-building, and trench warfare, why so called, etc. This centered attention upon the stem *tract*. As its meaning became clear the following list was elaborated:

subtract	distract	attraction
contract	extract	distraction
detract	retract	subtraction
attract	contraction	extraction

A study of the prefixes in these words gave a point of leverage for attacking the meaning of words containing them. In this type of prefix study only those words were listed whose stems were familiar to the pupil, as, for example:

recall	rebound	retake
reclaim	retain	reinforce
rearrange	reform	return
regain	remake	reframe, etc.

In a similar manner an acquaintance was made with the most common suffixes.

The meaning of some words was approached by the study of synonyms and equivalent idiomatic phrases. These were, as far as possible, studied in the context and discussed at length to bring out shades of difference in meaning. *An indomitable hero* met in

the pioneer tales brought forth the following synonyms and idiomatic phrases:

indomitable	fearless	stout-hearted
brave	heroic	intrepid
courageous	bold	audacious
resolute	daring	defiant
manly	plucky	undismayed

to look danger in the face
to screw one's courage to the sticking-point
to take the bull by the horns
to beard the lion in his den
to put on a bold front

Vocabulary exercises in the Lewis and Roland *Silent Readers.* The *Silent Readers,* by Lewis and Roland, for the fourth, fifth, sixth, seventh, and eighth grades, have each a number of pages devoted to vocabulary exercises independent of any of the reading lessons. The following typical samples are taken from the *Sixth Reader:* [1]

TURNING OUT THE INTRUDER

Arrange your paper with your name on the first line at the right, and your grade below it on the second line. Skip the third line, but on the next six lines, in the margin, write the figures, 1 to 8.

Here is an exercise that will let you see not only how well you can follow printed directions, but also how well you can arrange words in classes or groups. Read the first group of words at the bottom of the page. What kind of list does it seem to be? A list of several kinds of fruit, does it not? Or at least it would be a good list of fruit, if we could omit the word ROPE, which does not seem to belong to the list at all. After figure 1, on your paper, write the word ROPE.

In each of the other groups there is also a word that should be dropped out. You are going to write these words on your paper. Start with the next group, and when you find the word that should be omitted, write it after figure 2; and in the same way, finish the remaining groups in the exercise. When you finish wait quietly for the others to do so.

[1] Reproduced with the permission of the publishers, The John C. Winston Company. The size of the printing has been reduced.

1.	2.	3.	4.
apple	lion	mountain	lumbering
peach	tiger	gulfs	farming
rope	elephant	hills	grazing
grape	tusks	plain	manufacturing
pear	horse	valley	jumping
orange	cow	island	fishing

5.	6.	7.	8.
automobile	flowers	cup	chair
store	grass	saucer	table
bank	fence	plate	room
station	tree	pan	sofa
hotel	bush	pitcher	bench
church	weeds	bowl	bookcase

Putting Words where They Belong

Arrange your paper with your name on the first line and your grade on the second line. Divide the rest of your paper into four parts with lines drawn as shown below:

TRAVELING	BANKING	GRAZING	SEASHORE

Below is a list of words that is not very well arranged. Some words suggest a long railroad journey, some an errand to the bank, some the lonely occupation of a cowboy, and others a vacation at the shore. Write the words, TRAVELING, BANKING, GRAZING, SEASHORE at the top of your paper on the fourth line as shown above. Now rearrange the words below into four columns under these four heads, putting all the words that seem to suggest TRAVELING in the first column, and all the words that suggest BANKING in the second column, and every word that suggests GRAZING or SEASHORE in its proper column. When you finish wait quietly for the others.

discount	station	flock	cattle
train	interest	bridge	deposit

sheep	check	vault	account
cashier	salt-lick	grass	ranch
sand	waves	life-guard	balance
suitcase	taxi	signal	curve
ocean	swim	fence	herd
spring	adding machine	pass-book	tree
beach	fish	conductor	ticket
boardwalk	engineer	lighthouse	steamer

Can You Understand Relationship?

This drill will test your ability to recognize easily relationships between words. Beginning on the first line, write the figures 1 to 10.

In each group of words below, the first two words have a certain connection in meaning. When you discover this relationship between the first two words, you can find among the five words that follow, two other words that bear the same relationship. For example, in group one, the TIRE is made of RUBBER. Now if you look among the words that follow, you will easily see that the words HOUSE and BRICKS are related in the same way. (The HOUSE is made of BRICKS. Write these four words after figure 1 on your paper:

1. TIRE RUBBER house bricks

Look at group two. We can easily see that just as the TAILOR makes CLOTHES so the BAKER makes BREAD. So you will write these four words after figure 2 on your paper:

2. TAILOR CLOTHES baker bread

Complete the exercise by selecting the two words in each remaining group that are related in meaning in the same way that the given words are related in meaning. When you have finished, wait quietly for the others.

1. TIRE, RUBBER (wagon, circle, house, brush, bricks).
2. TAILOR, CLOTHES (baker, store, city, ship, bread).
3. FIRE, HEAT (knife, candle, burn, light, wood).
4. SAILOR, SEA (book, sing, soldier, fight, land).
5. GUN, BULLET (bow, horse, shoot, arrow, fly).
6. YOUNG, QUICK (old, fast, grow, father, slow).
7. APPLE, TREE (oranges, south, grape, vine, sweet).

8. CEILING, FLOOR (sky, attic, stair, earth, high).
9. WINDOW, GLASS (silk, knife, book, steel, pencil).
10. SQUIRREL, CHATTERS (bird, tree, sings, fly, nuts).

FINDING OPPOSITES

This drill will not only test your ability to follow printed directions, but also your ability to exercise a careful choice of words. Follow the directions very closely.

1. Arrange your paper with your name on the first and your grade on the second line. Beginning with the fourth line, in the margin, write the figures 1 to 10.

2. Below are ten sets of words. In each case, the first word is followed by four other words, one of which is exactly opposite in meaning to the first word. You are going to find these opposites. Look at group one. HIGH is the first word. Of the four words that follow it, which do you think is the exact opposite of HIGH? Of course it is LOW. Write this pair of opposites after figure 1 on your paper as follows:

1. HIGH LOW

3. After figure 2, write the second pair of opposites:

2. GREAT SMALL

Complete the exercise by selecting the opposites from each remaining group, and writing them after the proper figure on your paper. When you have finished put down your pencil and wait quietly for the others.

1. HIGH (sky, low, above, deep).
2. GREAT (less, large, small, beautiful).
3. HILL (mountain, valley, high, river).
4. MANY (few, more, plenty, less).
5. GRADUAL (quick, slowly, sudden, degree).
6. WOUND (sword, nurse, heal, bind).
7. LIGHT (bright, sun, shadow, darkness).
8. STRAIGHT (long, uneven, twist, crooked).
9. LAND (plain, water, farm, river).
10. SPRING (fall, cool, October, green).

4. The Latest Types of Silent-Reading Exercises

A. Motivated drill work in third-grade silent reading

A very valuable type of drill exercise in speed and comprehension, in the form of a game, has been reported by J. H. Hoover.[1] He used sets of cards two inches by four inches containing a sentence or a paragraph. He devised four sets of these cards, each set consisting of from 100 to 250 cards. The sets were lettered A, B, C, and D. The cards in each set were numbered in order of difficulty from the easiest card to the most difficult one. The following shows sample cards reduced in dimensions about half:

A 125
School closes at four o'clock in the afternoon. Show how the face of a clock looks at that time.

B 67
A donkey was loaded with salt. He lay down in the water. What happened to the salt?

The content of the first and last card of each set will now be given in order that the reader may have some idea of the types of reading material used. The type of response required is also indicated.

Set A — Action Cards

1. Face the rising sun.

150. The children played tag on the lawn. They soon felt tired and went to sleep. There were eleven children in the group. Make the figure "eleven" on your paper.

[1] Hoover, J. H., "Motivated Drill Work in Third-Grade Silent Reading," in the *Twentieth Yearbook of the National Society for the Study of Education*, part II. Public School Publishing Company, Bloomington, Ill.

SET B — LANGUAGE RESPONSE CARDS

1. Name some good winter games.

150. Last year I bought some roses for twenty cents a dozen. How many things does it take to make a dozen?

SET C — PRETENSE CARDS

1. Show how mother rocks the baby.

250. Mr. Wilson is digging potatoes to-day. He plows them out with a big team of mules and a plow. He puts them in a sack and carries them to the cellar. Act as if you were picking up potatoes.

SET D — ONE WORD RESPONSE CARDS

(*Yes, no, right, or wrong*)

1. Apples and peaches grow on the ground.

100. We went to church last Sunday. Uncle John and Aunt Lena came home with us. They took us out riding in the afternoon. Do you enjoy riding in a car?

The drill game is carried out in such a way as to give equal emphasis to speed and comprehension. The plan of the game will be made clear by giving the following excerpt from the report, just previously referred to:

PLAYING RULES (SET A)

The children are arranged in pairs according to some convenient plan. Each child is given a sufficient number of cards to occupy his time for the entire reading period. If the time allotted to a reading period is fifteen minutes, ten cards given to each child will probably be enough.

For convenience, let us say that Ruth and James are playing together. Each is given (say) ten cards from Set A. Each has a pencil and paper on which to keep the score of his or her opponent. James picks up one of his cards, reads it silently, hands it to Ruth who reads it carefully, then proceeds to perform the required activity. By his performance, Ruth judges whether or not James has gotten the thought of the passage which he has just read. She now gives him a score of "1" if he has performed his task correctly, and "0" if he has failed.

The teacher will do well to be in the midst of the children while

the game is in process, to watch the performances of the children being judged and the scoring of the ones doing the judging. Fairness, accuracy, and speed are things to be encouraged.

Ruth now reads one of her cards and James becomes judge. Thus the game proceeds until the twenty cards are exhausted or until the reading period has been consumed. The one having the greatest number of perfect scores (ones) at the end of the play period wins the game.

The rules for playing with cards from Sets B, C, and D are the same as the above directions which are based upon Set A, the only difference being in the nature of the responses given, and these varied responses do not affect the rules for playing.

Mr. Hoover carried out a carefully planned and extensive experiment to determine the effect of this type of drill upon speed. The pupils in thirty third-grade rooms were divided into two groups of equal size and mental attainments. One group of classes was given the drill ten minutes a day three times a week for three months, while the other group of classes was not. Both groups of classes were given the same amount of program-reading time and the same assignments, except the drill exercises, in reading.

The Monroe Standardized Reading Tests were given before the experiment began and at the end of the three months. The drill classes made very much more improvement in both rate and comprehension than the non-drill classes made. The results are summarized by Mr. Hoover as follows:

> It follows from this study of over eleven hundred third-grade pupils in thirty classrooms of Kansas City, Kansas, that in every phase of reading considered in this study the improvement made by the classes that were drilled in reading by the games devised by the writer was more pronounced than the improvement made during a corresponding period by the classes that devoted the same amount of time to other forms of reading exercises.

B. Exercises developed at Detroit for making reading function[1]

The following selected silent-reading exercises, excellent in training for self-directed, careful reading, can be used for seat work by one class while another is reciting, or they might profitably be assigned to the better readers of a class while the teacher works with the too-slow group. They were devised and used in the Detroit schools.

I. Directions for Illustrating Nursery Rhymes

"*There was an old woman who lived in a shoe,*
She had so many children she did n't know what to do."

Cut out a large shoe.
Put a little window in the shoe.
Color the shoe black.
Cut out six children.
Make two of the children peeking over the top of the shoe.
Make three children peeking out of the window.
Make one peeking over the toe.

II. Directions for Illustrating Stories

Read over the story —

"*The Three Little Pigs*"

Draw the pigs' house.
Draw the mother pig at the door.
Make the three little pigs going away.

Draw the first little pig when he met the man with some straw.
Draw the house of straw.
Make the pig looking out of the window.
Draw the wolf at the door.

Draw the second little pig when he met the man with the wood.
Draw the house of wood.
Make the pig looking out of the window.
Draw the wolf at the door.

---

[1] Courtis, S. A., and Heller, Regina R. "Exercises Developed at Detroit for Making Reading Function," in the *Twentieth Yearbook of the National Society for the Study of Education*, part II. Public School Publishing Company, Bloomington, Ill.

III. Directions for Constructing Toys

"How to Make A-B-C Blocks"

Fold your paper into sixteen squares.
Cut off one row of squares.
Make three cuts on each side like this.
In square one, print a capital A.
In square three, print a small a.
In square two draw a picture of an apple.
In square four draw a picture of an acorn.
Fold like a box and paste.

IV. Directions for Illustrating Social Studies

"Objects for an Indian Sand Table: an Indian Wigwam"

Get three sticks about six inches long. Tie them together at the top with string. Spread them out at the bottom so they will stand. This will make the framework of the wigwam.

Take a piece of brown paper nine by twelve inches. Cut a half circle from it. Make it as large as you can. This is the skin covering for your wigwam. Draw some Indian pictures on the skin. Fasten the skin covering around the frame work. Fold back the flaps for a door.

V. Type Demanding the Reading of a Short Description to Carry out the Directions

"The Goldfinch"

In the summer, father goldfinch wears a bright lemon-yellow suit. He has a black cap, black wings, and a black tail. His little wife's dress is a dull green or olive yellow.

Mr. and Mrs. Goldfinch build a tiny little nest shaped like a cup. It is made of fine grass and moss. They are very fond of thistles and dandelions for they can line their nests with the fluff from these little weeds. Then they can eat the seeds for their dinner.

VI. A Sample Scale of Reading Ability used in the First Four Grades

Draw a bird house.
Make it blue.
Put it in the top of a little tree.
Make a bluebird flying over the bird house.

Make another bluebird standing on top of the bird house.
Put a little red worm in his mouth.
The bird house is in a garden, so draw a round flower bed near the bird house.
Draw some yellow tulips in the middle of the bed and some red tulips around the outside.
Draw some low bushes with red blossoms on them in the garden, too.
Now think of a name for your picture and print it with black crayon at the top of your paper.
Draw a little square in the lower left-hand corner of your paper.
In the upper half of this square print the initial of your first name in green.
In the lower half of the square print the initial of your last name in brown.

C. Silent-reading exercises developed at Cedar Rapids and Iowa City

The following exercises have been selected from those given in the *Twentieth Yearbook of the National Society for the Study of Education*, Part II, as being different from any of the preceding types:

"Our Visit to the Fire Station"

(Reported by Miss Byrd Snyder, Grade I, Taylor School, Cedar Rapids, Iowa)

After a story and talk about fires and how they can be prevented, the following questions were given as a silent-reading lesson:

1. What day is to-morrow?
2. Why do we have Fire Prevention Day?
3. Who helps us when we have a fire?
4. Who pays the firemen?
5. How do the firemen know when we need them?
6. Why do we have a fire drill at school?
7. How can boys and girls help prevent fire?
8. Tell some rules we should obey.
9. Would you like to visit a fire station to-morrow?

The following lesson was developed with the children as a summary of their trip.

Our Visit to the Fire Station

On "Fire Prevention Day" we went to the fire station.
When we got there, the fireman invited us in.
We all went around on one side of the truck.
We saw the tank of chemicals.
They use chemicals whenever they can, instead of water.
Water spoils the furniture.
In the back of the truck we saw a big hose.
Then the fireman showed us the engine.
Laurence turned the crank and we heard the siren.
Ruby rang the bell.
These tell the people to get out of the way.
While we were still looking at the truck, there was a real fire.
After they had gone, we went outside a little while.
Then we went upstairs and saw their boots and the beds where they sleep.
Soon the firemen came back.
The fire was out.
Then the firemen let Paul and Albert go down the pole.

The following questions were given as a silent-reading lesson after the visit to the fire station:

1. What did we see on the side of the truck?
2. Why do they use chemicals?
3. What did we see in the back of the truck?
4. Who turned the crank?
5. Who rang the bell?
6. Why did they have these?
7. What happened while we were looking at the engine?
8. Where do the firemen sleep?
9. Why do they stay at the station all night?

A Lesson to Test and Develop the Ability to Comprehend Certain Words and Phrases

(Submitted by Emma Watkins, First-Grade Teacher, University Elementary School, State University of Iowa)

The calendar used for these exercises is of the ordinary sort distributed as advertising by commercial houses. It was mounted on a large sheet of cardboard in order to give the required stiffness.

The words, phrases, and sentences were printed on pieces of cardboard, care being taken to print the entire phrase or sentence in one line. After seating the pupils as close to the calendar as convenient, the lesson is begun by telling the pupils that they are to be shown flash cards upon which are printed words which will tell them what to point to on the calendar. Pupils are directed to stand as soon as they understand the meaning of the first phrase which is flashed. The pupil who finishes first is allowed to stand before the calendar and point to the appropriate place indicated by the flash card. This pupil continues the exercise, reading additional cards, until he makes an error, when his place is taken by some other pupil who can read that exercise. The lesson as described here is given under time pressure. It presupposes that the words and phrases which are used have been already developed with the class. The class is an advanced first-grade class.

1. Phrases

yesterday
to-day
to-morrow
next week
this week
the month
the year
the date
week after next
a week from to-morrow
two weeks from to-morrow
a week ago yesterday
day after to-morrow
day before yesterday
in two days
the first day of the month
the first day of the week
next Saturday
last Thursday, etc.
the last day of the month
the first quarter of the moon
new moon
full moon
last quarter of the moon
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
the day before the last day of the month
the sixteenth
the fifteenth, etc.
next Monday, etc.
next month
last Monday

2. Sentences

On what day do you go to Sunday-School?
What will be the last day of school this week?
(Other similar sentences.)

D. Types of remedial training work reported by C. J. Anderson and Elda Merton

One of the difficult problems of the classroom teacher is to " individualize classroom teaching in reading so that the pupils could be given remedial treatment according to their particular needs." C. J. Anderson and Elda Merton have made a distinct contribution to this problem.[1] A few of the devices tried by them, which are somewhat different from devices already given, will be treated briefly.

Listing words according to ten phonetic rules. The following excerpts from the articles by the authors mentioned above will make clear how pupils in the second, third, and fourth grades who had not attained first-grade reading ability, were helped with word difficulty:

Many teachers, following the phonic courses outlined in various reading manuals, require pupils to learn hundreds of phonograms, building up lists of words from each "family" as it is taught. Practically two thirds of all phonograms commonly taught would not need to be learned separately by the pupils, since the words containing them can be unlocked with the help of the ten phonetic rules of pronunciation.

The following seat-work exercise was given pupils to overcome "periods of confusion." Ten sheets of paper were fastened together. At the top of each was written one of the ten phonetic rules. In all study work the pupils watched for words containing these rules. As they found them, they listed these words on the pages where they belonged. Pupils were encouraged to look in newspapers, magazines, Sunday-School papers, etc., for these words also.

The following are the ten phonetic rules referred to above:

PHONETIC RULES OF PRONUNCIATION

1. When *e* comes at the end of a word of one syllable the *e* is silent and the preceding vowel is long. This is known as the rule of "Final *e*" — *can, cane; not, note; cub, cube.*

---

[1] Anderson, C. J., and Merton, Elda. "Remedial Work in Silent Reading"; in the *Elementary School Journal* (January, 1921), vol. 21, pp. 336–48.

2. When two vowels occur together in a word the first vowel is long and the second vowel is silent. This is known as the rule of "Two vowels" — *boat, people, neither, train, seize.*
3. *C* before *e, i,* or *y* has the sound of *s* — *cent, city, fancy.*
4. *G* before *e, i,* or *y* has the sound of *j* — *gentle, ginger, suggested, gypsy.*
5. *W* before *r* is silent — *write, wrestle, wrap.*
6. *K* before *n* is silent — *knight, knock, know.*
7. *G* before *n* is silent — *gnat, gnaw, sign, gnome.*
8. *Ph* always has the sound of *f* — *phonograph, elephant, phlox.*
9. When *ed* comes at the end of a word it adds a syllable when preceded by *d* or *t* — *roasted, faded, laughed, rolled.*
10. In words ending in *tion* or *sion* the accent falls on the next to the last syllable — *graduation, profession, ascension.*

Drilling on phrases. The following paragraph explains a type of work that followed the word drill:

When the pupils had attained first-grade reading ability, teachers eliminated word drills as such from the reading exercise and substituted lists of phrases. These phrases were taken directly from the lesson and contained the difficult words which needed special drill. This phrase drill served a triple purpose. It trained pupils to recognize word groups rather than single words, at the same time giving drill upon the pronunciation and the meaning of difficult words usually placed upon the board in word lists.

Flashing of phrases. Two plans were used for the flashing of phrases. Six booklets of phrases were made. The booklets were graduated in difficulty and size of type as indicated below:

Book I (*Primer type*)

at last
by and by
one morning
at home
all day
far away
just then

Book VI (*twelve-point type*)

half the kingdom
Early in the morning
On his way home
There was once
Once upon a time
a bit farther
In the meantime

ran away	with all his might
very well	toward evening
at once	In an instant

Some teachers found that the pupils learned the phrases by location, and consequently used small flash-cards two and one half inches by three and one quarter inches in size.

Building up meaning vocabularies. The following is a valuable means of building up meaning vocabularies in the primary grades:

Pupils in the primary grades built up large meaning vocabularies as a result of the following seat-work exercise. Sets of ten-word groups each were cut from old discarded primary readers, mounted on stiff paper, cut into separate word groups and placed in envelopes made by the pupils for this purpose. Each envelope was numbered. A pupil received an envelope and during the seat-work period illustrated each word group with pencil and crayons, and placed the proper word group directly under each picture. The teacher checked this work carefully at the close of each period. If a child had made mistakes, he was told what the phrases were and given another chance to score 100 on the following day. Examples of mistakes were "a brown house" for "a brown horse," "the little chicken" for "the little children," etc. When pupils scored 100 their envelopes were collected and they were given a new number. The teacher kept a record of the number of each envelope as a child finished it. As no two word groups in the entire set of envelopes were the same, a child who had completed fifteen envelopes would have comprehended one hundred and fifty word groups well enough to illustrate them correctly. The following examples of these word groups were taken from one of these envelopes:

a red squirrel	our flag
a fat boy	seven children
three big eggs	the blue flowers
a red and yellow kite	two little robins
a wee, wee house	some brown leaves

Using paragraph cards with specific questions on the back. The following gives the content of one of the para-

graph cards used as a remedial device for the pupils showing inability to give correct answers to specific questions. The questions are printed on the back of the card:

THE ESKIMO'S HOUSE

An Eskimo's winter home is made of snow. The Eskimo makes his house in one day. He cuts big blocks out of the snow. He puts them together. He must work carefully. At last the house is finished. There is a hole in one side. It is just large enough to crawl through. That is the door. What a queer little house with its queer little door! How can people live in it? But they do.

Questions

How long does it take to make an Eskimo winter hut?
Of what is it made?
Where is the door?
How large is it?

SOME POINTS TO REMEMBER

1. Training lessons for what three general purposes are enumerated in the chapter?
2. Enumerate the five devices treated under the first major heading.
3. Enumerate the three main purposes discussed under the second major heading.
4. List the different means given for developing a sense of the organization of reading matter.
5. What main activities for vocabulary training are treated in the chapter?

PROBLEMS FOR STUDY AND DISCUSSION

1. Formulate a phrase-flashing exercise, suitable for an intermediate-grade class.
2. Try one of the two plans given under "Reading under a Time Limit," and report as to which type of pupil comprehended the best, the slow, the medium, or the fast reader.
3. Give examples of reading matter that would be useful in skimming.
4. How do you explain that primary teachers as a rule have not used action sentences and exercises for silent reading, instead of for oral reading?
5. Select a unit of reading matter from one of your reading books, suitable for silent reading and reproduction.

6. Select a cumulative story adapted for silent reading and factual questioning.
7. How do you account for the absurd answers given to factual questions, as listed on pages 173–174?
8. What do you consider the chief source of error in relational comprehension in silent reading?
9. Formulate a training exercise in relational comprehension, using —
   (*a*) a selection from a reader
   (*b*) a selection from a history
   (*c*) a selection of geographical material
10. Report a scheme for training in silent reading, in connection with a language or a grammar lesson. In connection with an arithmetic lesson.
11. How could you correlate reading with construction work?
12. Select a unit of reading matter suitable for a certain grade, and formulate a plan for training in the comprehension of the organization.
13. Formulate a set of five exercises for training in the ability to grasp the central thought or the essential total meaning of a paragraph or stanza.
14. Choose a reading unit suitable to a vocabulary-problem lesson, and give a brief account of your plan.
15. Formulate a plan for a lesson on word study, similar to one of those quoted from Judd.

CHAPTER IX

READING TESTS AND THEIR USE IN IMPROVING READING

Note: The reading of this chapter will be of greater value and the meaning clearer if a copy of each test described is at hand while reading the text. For the convenience of those who may wish to order samples or quantities of the tests the following information is listed, giving the publisher and address, the name of the test, and prices.

The Public School Publishing Company, Bloomington, Illinois. Under the auspices of the Bureau of Research, University of Illinois.

1. Courtis Silent-Reading Test No. 2. Sample Set, 20 cents.
2. Gray Oral Reading, 80 cents per 100. Sample Set, 6 cents.
3. Gray Silent-Reading Tests. (Individual Tests.)
   Sample Set, 15 cents.
4. Stone Narrative-Reading Tests. Sample Set, 40 cents.
   Test for Grades 3 and 4 — (16 page booklet) — 10 cents each.
   Test for Grades 5 and 6 — (16 page booklet) — 10 cents each.
   Test for Grades 7, 8, and 9 — (16 page booklet) — 10 cents each.
   Order 1 set of rate cards for each set of booklets . $2.00 per set.
   Pupil's answer and record sheets . . . . . 75 cents per 100.
   (1 set of rate cards and booklets sufficient for a room of pupils will test an indefinite number of pupils, as the booklets can be used repeatedly.)
   1 diagnostic chart free with each 25 booklets.
5. Monroe Standardized Silent-Reading Tests.
   See also Illinois Examination.
   Sample Set, 7 cents.
   Form 1.
      Test I, for grades 3, 4, and 5, 80 cents per 100.
      Test II, for grades 6, 7, and 8, 80 cents per 100.
   Form 2.
      Test I for grades 3, 4, and 5, 80 cents per 100.
      Test II, for grades 6, 7, and 8, 80 cents per 100.
   Form 3.
      Test I, for grades 3, 4, and 5, 80 cents per 100.
      Test II, for grades 6, 7, and 8, 80 cents per 100.
6. Holley Sentence Vocabulary Scale, Series 3A, 75 cents per 100.
   Sample Set, 6 cents.

(Price list of September, 1922.)

Bureau of Publications, Teachers College, Columbia University, New York City.

Thorndike-McCall Reading Scale.

For examiner: One copy of Manual of Directions. One Record Sheet for each class. Directions and Record Sheets are supplied with each order.

For pupil: One copy of the form selected. Price: $2.25 per 100.

Sample set: One copy of Form 1 and direction bulletin. Price: 10 cents.

Thorndike Visual Vocabulary Scales.

There are four scales, A2 x and A2 y, B x and B y. The words in the A series are classified as words meaning flowers, animals, names, games, books, etc.; the words of the B series — words about war, fighting, business, or money, church or religion, color, etc. The X or Y series may be used as alternates to measure improvement over a certain period or to check results. The four scales are of approximately equal difficulty.

Material required

For examiner: One copy of Manual of Directions. Price: 40 cents. One answer stencil for each scale. Price: 5 cents each. One Record Sheet for each 50 pupils, or class. Price: 3 cents.

For pupil: One copy of each scale used. Scale A2 x and Scale B x are usually given at one time. Price: Each scale, 50 cents per 100; $4.25 per 1000.

Sample set: One copy of each of the four scales. Price: 4 cents postpaid.

(From price list of February, 1921.)

Russell Sage Foundation, 130 East 22d Street, New York City.

Scale for Measuring Ability in Silent Reading. May Ayres Burgess.

Prices of Scales — Postage paid:

Sample copies, five cents each.

Less than 1000, $1.25 a hundred.

1000 or over, $1.00 a hundred.

(From price list of December, 1920.)

World Book Company, Yonkers-on-Hudson, New York, Chicago, and Dallas, Texas.

Haggerty Reading Examination

Sigma 1. *By M. E. Haggerty and Margaret E. Noonan. 8 pages. Illustrated. Price per package of 25 examination booklets with Class Record, $1.40 net.*

Key for Sigma 1. *Card. 1 page. Price 5 cents net.*

Sigma 2. *By M. E. and Laura C. Haggerty. In preparation.*

For grades 3 to 6.

Key for Sigma 2. *In preparation.*

Sigma 3. *By M. E. and Laura C. Haggerty.* 8 *pages. Price per package of* 25 *examination booklets with Class Record,* $1.50 *net.*
Key for Sigma 3. *Card.* 2 *pages. Price* 10 *cents net.*
Manual of Directions. 48 *pages. Price* 30 *cents net.*
Specimen Set. *An envelope containing* 1 *each of Reading Examination: Sigma* 1 *and Sigma* 3; 1 *Key for each of the two tests;* 1 *Manual;* 1 *Class Record. Price* 50 *cents postpaid.*
(From price list of February, 1921.)

Department of Psychology, University of Indiana, Bloomington.
The Pressey-Skeel Group Vocabulary Test.
(Printed in primer type.)

In connection with the recent movement to measure abilities and achievement scientifically, and to set up objective standards of accomplishment, there has been a rather large number of reading tests devised. A few of these have been used widely over the country, and others have been used very little. These tests are of interest not only because they are valuable measuring instruments to use, but also because they show ways by means of which the teacher may improve the usual classroom tests with material at hand.

1. Oral Reading Tests

Gray's oral-reading test. The most widely used oral-reading test is the one devised by Dean Gray, of the School of Education of Chicago University. After several years of experimenting, testing, and retesting, he arranged a large sheet of twelve paragraphs, printed in type sizes suited to the grade to be tested, and increasing in difficulty from primer material to material too difficult for the eighth grade. The paragraphs reproduced on page 220 are typical of two sizes of type used.

Each child is tested individually, preferably in a room by itself. The grade or score depends upon the rate of reading combined with the errors, such as pronunciations,

1

A boy had a dog.
The dog ran into the woods.
The boy ran after the dog.
He wanted the dog to go home.
But the dog would not go home.
The little boy said,
"I cannot go home without my dog."
Then the boy began to cry.

6

The part of farming enjoyed most by a boy is the making of maple sugar. It is better than blackberrying and almost as good as fishing. One reason why a boy likes this work is that someone else does most of it. It is a sort of work in which he can appear to be very industrious and yet do but little.

---

repetitions, etc. The reading is timed by a watch. The tester, preferably without the child's knowing it, ascertains and records the number of seconds it takes to read each paragraph, as far as the child is able to read without too many errors. As the child reads, the tester records on a copy of the paragraphs the errors made by the pupil. Within certain limitations the faster the pupil reads and the smaller the number of errors, the higher the score. Some practice is needed to develop skill in giving the test. The directions for recording errors are as follows:

The sun pierced into my large windows. It was the opening of October, and the clear sky was of a dazzling blue. I looked out of my window and down the street. The white houses of the long, straight street were almost painful to the eyes. The clear atmosphere allowed full play to the sun's brightness.

If a word is wholly mispronounced, underline it as in the case of "atmosphere." If a portion of a word is mispronounced, mark appropriately as indicated above: "pierced" pronounced in two syllables, sounding long *a* in "dazzling," omitting the *s* in "houses" or the *al* from "almost," or the *r* in "straight." Omitted words are marked as in the case of "of" and "and", substitutions as in the case of "many" for "my" insertions as in the case of "clear"; and repetitions as in the case of "to the sun's." Two or more words should be repeated to count as a repetition.

FIG. 13. DIRECTIONS FOR RECORDING ERRORS IN THE GRAY ORAL-READING TEST

Advantages of this test. An important advantage in using such a standardized test is that, from its use, teachers and pupils may know how each class and grade ranks, in comparison to standards for the country as a whole. These have been established as a result of the testing of thousands of pupils in each grade in different parts of the United States. The test also has large diagnostic value. In the case of pupils not up to standard, the record for each will show whether or not the child reads too slowly, and what is the nature of the errors he makes.

The writer once asked a teacher of a third-grade class to let him hear the best two readers in the class. Both read without errors, but it appeared that one read considerably faster than the other. Both were given the Gray test. The time of the one was very much less than that of the other, and both made very few errors. A careful listening to the slower one showed that he read by words, and the faster one by groups of words. The problem of the slower one was to learn to phrase properly. The teacher was not sufficiently aware of the importance of phrasing in relation to the rate of reading and to the expression of the meaning.

In some cases the errors will be of certain types. For

instance, a pupil may make most of his errors through a habit of repetition. It will make a stronger impression upon the pupil if he is shown the teacher's record, indicating just where he repeated in each paragraph, than if he is merely admonished in the usual way. This individual diagnosis is one of the chief advantages of the test. If it is not possible to test all of the pupils of the school in oral reading, it is more important to test the pupils in the lower grades, and the poorer readers in the other grades.

Limitations of the test. The time taken to test pupils by an elaborate scheme of this kind naturally raises the question as to whether it pays. This is an important question, which, of course, can be answered only by each school and teacher. The writer believes that the light thrown upon the elements determining good oral-reading, and the interesting facts revealed through an objective measurement, will make it worth while for all teachers of the three lower grades to do some testing with Gray's Standardized Paragraphs. All need not be tested, but much light will be thrown on the reading difficulties of some by such testing.

The Jones vocabulary test. A number of years ago R. G. Jones made a study of all the words found in ten primers. These were divided into phonetic words and sight words. In order to test the pupils' recognition of the more commonly used words, he listed on a card the phonetic words found ten or more times. He listed these in the order of the number of times they recurred in the primers. For instance, *bit* was found 1101 times and stands first. He did the same with the sight words. The test consists in seeing how many of these words the pupil can pronounce in list form. The testing must, of course, be done individually. The author has established standards for the upper first grade, and each half of the second and third grades. By

using this test a teacher may obtain comparative results from different methods or systems of teaching reading. A class score may be secured by testing ten pupils, promiscuously selected. It will repay every lower-grade teacher to try out this test, and use it as a help in formulating similar tests adapted to her reading material.[1]

2. Hearing-Reading Tests

How to test the listening powers. So far there has been no scientific attempt to test listening ability. The following, taken from the *Teacher's Manual* for the *Boys' and Girls' Fifth Reader*, by Bolenius, is suggestive:

Before beginning the reading, ask the pupils to write their names and the date at the top of a sheet of paper. Then let them lay these papers on the desks face downward, so that they will not catch any curious eyes. Next, the teacher announces that she is going to read a story. Instead of letting the class read the introduction themselves, the teacher should use this herself to introduce the story. The children should sit in comfortable positions, with no books whatsoever, but alert and ready to listen and enjoy.

Many teachers may prefer to distribute the readers to the class after the second day's reading, instead of at the beginning.

The teacher reads *The Rivals* on page 1 in her clearest, most interesting voice. When she concludes, she should ask the children to turn their papers face up and copy the questions she will dictate about the story that they have just heard. There are two ways to do this: (1) she may tell them to leave two lines vacant between questions for the insertion of the answers; or (2) she may dictate the question, have the children copy it, and answer it at once, the teacher meanwhile observing the children to find out who have quick and retentive minds and who have trouble to think and to remember.

The following questions bring out the main facts:

I. The Rivals (page 1)

1. Whom did Tim want to beat at hoeing turnips? [Perkins, or the hired man — accept either one.] 2. Who taught Cameron to

[1] Read "Standard Vocabulary," by Jones, R. G., in *Fourteenth Yearbook of the National Society for the Study of Education* (1915), part 1, pp. 37–43.

hoe turnips? [Tim.] 3. What did they call the long ridge of earth in which the turnips were planted? [A drill.] 4. What sound did the hoes seem to make? [Click-click.]

II. The Race (*page* 6)

1. Was the race in the morning or in the evening? [Evening.] 2. Who told Tim how to race Perkins? [Cameron.] 3. Who won the race? [Tim.] 4. Who came to the field at the end of the race? [Tim's father; or Haley; or the farmer.]

3. Testing Silent Reading

A. Factors to consider in selecting reading tests

In order that the discussion of the silent-reading tests may be of more value and interest, the following points should be kept in mind in considering each:

1. Does the test measure rate, or comprehension, or both? Does it measure the degree of difficulty the pupil is able to grasp, or the amount done? Do the scores reveal the accuracy with which the pupil apprehends the reading done?
2. How is the rate tested? In terms of the number of words read per minute, or in terms of some other unit? Standards in rate are generally stated in terms of the number of words read per minute.
3. What element or elements of comprehension are tested? While the following analysis is not entirely free from overlapping of elements, it may be helpful.
   (*a*) Grasp of the facts
   (*b*) Conception of the rational relationships (The reasoning element)
   (*c*) Comprehension of the organization
   (*d*) The getting of the central idea or the essential total meaning or effect
   (*e*) Understanding of directions
   (*f*) The subtler elements of appreciation, criticism, discovering new problems, judging validity of statements, etc.
4. How is the comprehension tested? The following types of responses have been used:

(*a*) Reproducing
(*b*) Writing answers to factual questions
(*c*) Writing "yes" or "no"
(*d*) Writing answers to problem questions
(*e*) Indicating answers to questions by underlining one of several given answers
(*f*) Adding a detail, such as a line, an eye, or a tail, to complete a drawing
(*g*) Indicating comprehension of ideas by drawing a line, ring, or cross on a picture
(*h*) Indicating a grasp of the essential total meaning of a paragraph by following correctly simple drawing instructions in the paragraph

5. Is the reading-content narration, description, directions, poetry, the informational type, or a mixture of two or more? Is rapid or careful reading tested?
6. Is the method of scoring a simple or a complicated one?
7. What criticisms may be made regarding the test?

Necessity of using several tests. It is hardly possible to get a complete and adequate testing of silent-reading ability by the use of any one test. As there are various types of silent reading, varying in purposes, conditions, and elements involved, it would appear impossible to have a single test that would completely measure silent-reading ability. The ones that have been most widely used and the ones best adapted to classroom use will be described.

B. The Monroe Standardized General Survey Silent-Reading Tests

These tests have been devised after the plan of the Kansas Silent-Reading Tests, which were objectionable because they consisted too largely of reading puzzles not typical of ordinary reading situations. Test I is for the third, fourth, and fifth grades, and Test II is for the sixth, seventh, and eighth grades. The original edition of these tests was used extensively. Sample exercises from the original edition

may be seen on page 193. The improvements made in the revised edition are the elimination of complicating directions and the type of exercise that required a choice between two alternatives, such as "yes" or "no," as a comprehension response.

The content and the type of response in the Monroe tests. The following exercises are taken from the revised edition. Test I, Form I, for the third, fourth, and fifth grades.

1. One evening in the late autumn I saw some beautiful
11 birds come out of the bushes. They were as white as snow.
24 They were swans. They flew high in the air and sailed away
37 to the warm South.
38 What kind of bird did I see?
45 pigeon duck goose canary swan

193 5. Six white eggs on a bed of hay,
201 Flecked with purple, a pretty sight!
207 There as the mother sits all day
214 Robert is singing with all his might.
221 The above lines of a poem tell about a bird's nest. Of
234 what does this stanza say the bird's nest was made?
243 sticks leaves hay moss grass

FIG. 14. SAMPLES OF THE MONROE SILENT-READING TEST — I

In the instructions, the pupil is told to answer each question by drawing a line under the correct word. He is given three preliminary exercises like this before beginning the real test in order to make sure that the pupil understands what to do.

It will be noted that each of the foregoing exercises is a test of factual comprehension. Of the seventeen exercises in the test, eight are of the factual type. The other nine exercises test the pupil's ability to grasp the essential total meaning or effect of the paragraph or stanza. Of the sixteen exercises in Test II, Form I, for the sixth, seventh, and eighth grades, only one is clearly of the factual type.

The following exercises taken from the upper-grade test are typical of those that test the pupil's grasp of the essential total meaning or effect:

60 2. It was cold, bleak, biting weather; foggy withal; and
70 he could hear the people in the court outside go wheezing up
82 and down, beating their hands upon their breasts and stamp-
92 ing their feet upon the pavement-stones to warm them.
99 What kind of picture does this paragraph describe?
107 comfortable luxurious cheerless pleasant exciting

409 9. At every turn the maples burn,
415 The quail is whistling free.
420 The partridge whirrs and the frosted burrs
427 Are dropping for you and me.
433 What season of the year does the stanza tell about? Draw
445 a line under the one you think.
451 spring summer autumn winter

560 12. He was lying alone, one sunny spring day, on a mossy
571 bank beside the clear stream flowing past with steady, cease-
581 less motion. He had his book open in his hand, but he was
not reading.
595 Draw a line under the word which tells why he was not
607 reading.
608 frightened asleep hungry cold unhappy

FIG. 15. SAMPLES OF THE MONROE SILENT-READING TEST — II

The rate and comprehension scores. The pupils are allowed exactly four minutes to read and indicate the answers. The method of determining the rate and comprehension scores is made clear in the following paragraph, taken from the sheet of directions:

On this test the pupil is to be given two scores, one for rate and one for comprehension. The rate score is the average number of words read per minute. The words of the exercises have been counted and the accumulative totals printed in the left-hand margin. Take the number which the pupil has marked as indicating the line he was reading when time was called, and divide

it by 4, since four minutes were allowed for the reading. The quotient is the number of words he has read per minute and becomes his rate score. The pupil's comprehension score is the number of exercises which he has done correctly. The pupil is expected to underline the correct word. However, accept any indication of the right word as correct. Write both the rate and comprehension scores in the upper right-hand corner of the first page of the test folder. Note that in the case of Test II, 5 is to be added to the comprehension score and 29 to the rate score to make them comparable with the scores on Test I.

Possible criticisms of the Monroe tests. A strictly accurate measuring-rod will have units of exact equality in every respect. Every inch on the yardstick, for instance, is exactly equivalent to every other inch. But Monroe has a mixture of content-units. Some are prose and some poetry. Some are descriptive and some narrative. Again, especially in the test for the third, fourth, and fifth grades, a part of the time, the test is measuring ability to respond to fact questions, and a part of the time it is measuring the ability to respond to thought or interpretative questions.

Furthermore, it does not appear that the test was worked out with sufficient care to insure that the units are of equal difficulty. Out of sixty-nine fourth-grade pupils tested, a teacher found that one exercise tried by all was done correctly by 96 per cent of the pupils, while another tried by all was done correctly by only 68 per cent of the pupils. Exercise No. 12, reproduced on page 227, will no doubt be brought into question by many teachers as being very easily susceptible of misinterpretation, and, consequently, will prove to be more difficult than some of the others in the same test.

While it is claimed that the test measures the rate of reading in terms of the number of words read per minute, it apparently does not do so. Gray established his rate norms, as given on page 21, by timing individually the

pupil's reading of one hundred words. The question may naturally arise as to why the rate in the Gray Tests is so much greater than in the Monroe Test as shown in Table II.

TABLE II. COMPARISON OF THE MONROE AND GRAY RATE STANDARDS

Words per Minute

GRADE	2	3	4	5	6	7	8
Gray	90	138	180	204	216	228	240
Monroe		86	121	137	147	160	177

The Monroe rate-value is not an accurate measure of rate in terms of the number of words per minute, because the time unit includes the time the pupil is deliberating, re-reading, and recording responses. In view of the fact that considerable re-reading will be done by the pupils, more by some than by others, the rate-score is not accurate as a measure of the number of words read in a minute.

Evaluation of the Monroe test. Notwithstanding the inherent defects in the test, it provides a valuable index to the pupil's ability to do careful reading under a time limit. It reveals whether the pupil is rapid and accurate, rapid and careless, slow and accurate, or slow and inaccurate. It is very important for the teacher to know these characteristics in a definitely measured way in order to administer effectively to the individual needs of the pupils by means of special groupings, adaptation of content to ability, and the use of remedial instruction. In addition the tests are relatively inexpensive, easily given without consuming much time, and easily scored. The relation of rate and comprehension attainment for a school and the accomplish-

ment of the school as compared to the average of the country may be made clear and emphatic by graphing the results.

C. Scale for Measuring Ability in Silent-Reading, by May Ayers Burgess

Similarities to the Monroe test. Like the Monroe test, the Burgess test consists of short units and the score depends upon the number of exercises done correctly in five minutes. Both measure careful reading under a time limit.

Essential characteristics of the Burgess test. The type

1. This naughty dog likes to steal bones. When he steals one he hides it where no other dog can find it. He has just stolen two bones, and you must take your pencil and make two short, straight lines, to show where they are lying on the ground near the dog. Draw them as quickly as you can, and then go on.

FIG. 16. A SAMPLE UNIT OF THE BURGESS SILENT-READING SCALE

of comprehension response is unique. This can be shown best by reproducing one of the twenty units, each of which requires the same type of response.

The Burgess theory of measurement. The author of this test has made a stimulating contribution to the theory of measurement in education. A reproduction of the author's summary with reference to the three types of tests

and the single variable will suffice for the purposes of this treatment: [1]

1. The innumerable factors which influence the results of testing may be classified into three distinct fundamental groups. They are variables of quality, of difficulty, or of amount.
2. The measurement of quality is illustrated by contests in marksmanship or in bowling. In these contests the difficulty of task and the time allowed for doing it are maintained as constants, and the variable measured is the quality of the performance.
3. The measure for difficulty is seen in the high jump. There quality and time are constants, and the variable is the difficulty of the hardest task successfully done.
4. The measure for amount is seen in the race, where quality is but slightly operative, difficulty is constant, and the variable measured is either the amount done in a given time, or the time required to do a given amount.
5. Time and amount are complementary terms, each of which depends for its meaning upon the other. In the threefold classification of variables, the term *amount* is to be considered as carrying with it its companion term *time*.
6. Educational measurements are attempts to answer the three fundamental classroom questions: "How well can he do?" "How hard work can he do?" and "How fast can he do it?" Each seeks to measure one of the three fundamental factors, and, according to which it selects, it may be classified as a test or scale for quality, for difficulty, or for amount.
7. The student of educational measurement who plans to devise a scale for ability in any school subject must consider, first, which of the three variables he will attempt to measure; and second, having chosen that variable and thereby fixed the type of scale which must be employed, what are the implications as to the methods he must follow.

The following excerpts are selected to show how the author of the test concluded to use this particular type of test:

[1] Burgess, May Ayers. *The Measurement of Silent Reading.* Russell Sage Foundation, New York, 1921.

Reading does not readily lend itself to measurement by scales for quality of product. One reason for this is that it does not directly result in a tangible objective product of such a nature that its goodness or quality can be measured. Another reason is that for practical purposes the problem of measuring reading is to discover not what rich and varied meanings the subject draws from the printed page, but rather, how rapidly he can read the material with a sufficient degree of comprehension to get from it the essentials of its meaning.

Reading is a subject in which the time allowed is of great influence on scores secured through testing. In scales for reading, the time element must therefore be controlled. Since the task of recording rate or controlling time, in a large group of children, for every child, at every step of a difficulty scale, presents nearly prohibitive difficulties of administration, the attempt to make a difficulty scale for reading was abandoned.

Reading is readily measurable by tests and scales for amount done. In such measurement, the quality required is reading good enough to get the essential thought. The difficulty of the testing material is confined to a single type, and is maintained at a single level. A time limit is set which shall result in scores fairly distributed between 0 and 100; and the variable measured is the amount of such reading under such conditions that the child can do successfully in the time allowed. The new scale for measuring silent reading, Picture Supplement Scale 1, is a scale for amount done.

The four outstanding characteristics of the scale are given as follows by the author:

The scale has four outstanding characteristics. The first is that it makes a definite attempt to measure a single ability, which is the ability to read silently a single type of material, at a constant level of difficulty, in a fixed period of time. It measures the amount of reading of a practically useful nature which the child can do in five minutes.

The second outstanding feature of the new scale is that a careful attempt has been made to discover the controlling factors in silent reading. Some twenty-five such factors have been identified. One, the child's rate of reading, has been adopted as the variable to be measured; and the remaining twenty-four factors

have been, in so far as possible, held constant. It is believed that by following this method, a test has been prepared in which every task presents the same type of reading difficulty as every other, and for which the scores represent comparative amounts of one single sort of reading ability.

The third outstanding feature is that the test is planned for classroom use. It can be given to large numbers of pupils simultaneously. It requires five minutes for actual testing; and can be scored accurately, rapidly, and easily. The cost of printing has been kept low; and companion editions can be prepared as need arises. Three such alternate editions have already been prepared as Picture Supplement Scales 2, 3, and 4.

The fourth outstanding feature is that grade scores have been turned into equivalent scale values for those grades. This makes it possible, in testing with Picture Supplement Scale 1, to measure the ability of each child in terms of its relation to the known abilities of other children who are approximately of the same degree of maturity, and have received approximately the same amounts of training.

The pupil's score. The score depends upon the number of paragraphs marked correctly. Table III shows the scheme, which gives a higher credit the lower the grade for a certain number of paragraphs read correctly.

TABLE III. CREDIT CORRESPONDING TO EACH NUMBER OF PARAGRAPHS MARKED IN EACH GRADE

GRADE	NUMBER OF PARAGRAPHS READ AND MARKED CORRECTLY																				GRADE
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
3	0	26	32	38	44	50	56	62	68	74	80	86	92	98	100	..	..	..	..	..	..	3
4	0	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	100	..	..	..	..	4
5	0	8	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	100	..	..	..	5
6	0	2	8	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	100	..	..	6
7	..	0	2	8	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	100	..	7
8	..	..	0	2	8	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	100	8

What the Burgess scoring plan does not reveal. There are two distinct factors in reading efficiency, rate and com-

prehension. The Monroe test, which is similar to the Burgess test, gives a score in rate and one in comprehension, as has been noted previously. Any test of the type of these two which does not reveal in the pupil's score some index of the pupil's accuracy or inaccuracy will be limited in its value to schools. The teacher and the supervisory officer need to know the relation of the pupil's rate and comprehension in order to provide the right kind of training and experience. With the Burgess plan of scoring, it is impossible to graph the results for a room or a school to show this relationship.

Evaluation of the Burgess test. The Burgess test has been very carefully worked out and no doubt is one of the most accurate measuring-rods, for the thing it professes to measure, of any of the scales or tests. It is an adequate measure of a certain type of reading on a certain level of difficulty. The author does not claim that it is an adequate measure of what some term general reading ability.

D. The Stone Series of Narrative-Reading Tests [1]

Within recent years a number of very good paragraph tests have appeared. But for a long time no progress was made in the direction of the measurement of the rapid continuous type of reading. In all the paragraph tests the pupil is permitted to reread the paragraph in attempting his comprehension response. Thus we see that the type of reading ability measured by the paragraph tests is of the study type in contrast to the recreative type of reading. The Stone tests are designed to measure the rapid continuous type of reading ability.

The series consists of a test for grades three and four, a

[1] Read: *Recent Developments in Silent-Reading Tests*, by Stone, C. R., Journal of Educational Research, September, 1922. Public School Publishing Co., Bloomington, Ill.

test for grades five and six, and a test for the Junior High School. Additional forms are being prepared so that it will be possible to measure progress as well as attainment.

Each test has a preparatory test and a real test. The preparatory test is carried out in every respect just as the real test except that the reading unit is shorter. The preparatory test insures that the pupils will be able to follow the directions accurately in the real test. It also permits the pupil to become adjusted to the conditions necessarily incident to a formal test.

In the real test for grades three and four, there are two stories of equal difficulty and length. The pupils are tested upon the first story one day and upon the second story the next day. The pupil's rate is his average on the two stories. There are ten questions on each story. His comprehension measure is the number of questions answered correctly. The fifth- and sixth-grade test is constructed on the same plan. The Junior High School test consists of one long story.

How the rate is measured. The rate in terms of the average number of words read per minute is secured for the reading of the whole story. This is done by means of a set of rate cards which are exhibited at intervals of 5 seconds. For each test a table is constructed like the following:

Time taken to read the whole story	*Average number of words per minute*
1:25	650
1:30	612
1:35	572

A rate card is provided for each step in the table. The rate is printed on the front of the card (4 x 6) in large figures and the time is printed on the back for the convenience of the assistant keeping time and exhibiting the cards. When the pupil reaches the end of the story he looks up, gets his rate number, and copies it on his record sheet.

Stone's measure of comprehension. As soon as the pupil has recorded his rate score, he proceeds to answer a list of questions on the story. Under each question is listed five answers, only one of which is correct. These answers are designated a, b, c, d, and e. He selects the answer which he thinks is correct and enters the letter on his answer sheet. The questions are intended to test his grasp of the main points of the story.

The diagnostic chart. A unique class record sheet is provided. Each pupil is represented on a chart by a dot placed by the teacher as determined by his rate and comprehension scores. This gives a bird's-eye view of the relative efficiency of the class in each of the two elements, rate and comprehension, and also indicates the relative standing of each pupil in rate and comprehension. The plan makes it easy to interpret the results of the test, to make a diagnosis for the class as a whole and for individuals and groups within the class. In the pamphlet of instructions suggestions are given with reference to the grouping of the pupils and the giving of remedial instruction.

The cost of the tests. While the initial cost of an equipment for testing a room of pupils is relatively high, the ultimate per-pupil-cost of testing is reduced to a minimum because all the equipment with the exception of the pupil's record and answer sheet can be used over and over again indefinitely. Thus, with only a slight additional cost, any number of pupils may be tested with one set of tests.

E. The Courtis Silent-Reading Test

The content. The Courtis test consists of a simple story of 567 words. The first part of the story is reproduced in exact type in Fig. 17. This story is about a third- or fourth-grade story.

The Kitten Who Played May-Queen

When the spring sun was warm and the 13
spring flowers had begun to bloom, our children 21
had a May-party out on the lawn. Every little 30
boy or girl who lived nearby was invited. Betty 39
wrote the invitations and Bobby carried them to 47
the children.

When the day of the party came, Daddy planted 49
a May-pole and Mother tied it with gay-colored 58
ribbons. There were to be games and dances 66
on the grass and a delicious supper, with 74
a basket full of flowers for every child. 82

FIG. 17. AN EXACT REPRODUCTION OF THE FIRST PART OF THE COURTIS SILENT-READING TEST

The rate test. As this is a group test, all the pupils read at the same time, beginning exactly together at the teacher's signal. The rate of reading is determined by having the pupils each mark the last word at the end of each half-minute and at the teacher's signal. The pupils are allowed to read for exactly three minutes. The number of words read per minute is found by determining the number of words read at the end of two minutes and dividing that number by two. The Courtis rate represents the rate of silent reading of rapid narrative material. As shown in Fig. 8, page 23, the Gray rate standard is higher than the Courtis in the fourth and fifth grades, but the Courtis standard rate is considerably higher than the Gray in the seventh and eighth. To what extent the latter difference is due to the difference in the type and difficulty of the content of the two tests has not been determined scientifically, but that is the probable explanation of it.

The comprehension test.[1] The Courtis comprehension test is a separate test immediately following the rate test. In contrast to the Gray comprehension test, the pupils have the material before them as they answer the questions. This is made clear by reference to the following excerpt from the comprehension test:

When the day of the party came, Daddy planted a May-pole and Mother tied it with gay-colored ribbons. There were to be games and dances on the grass and a delicious supper, with a basket full of flowers for every child.

1. Were the children to have anything to eat?....._____
2. Were they going to play on the grass?....._____
3. Were they going into the house to dance?....._____
4. Were the baskets to be full of flowers?....._____
5. Was it Daddy who tied the ribbons to the pole?..._____

[1] Read: Courtis, S. A. "The Problems of Measuring Ability in Silent Reading"; in the *American School Board Journal*, May, 1917.

It will be noted that the questions are so worded that they may each be answered by "Yes" or "No." They are factual questions, and consequently test only the factual element in comprehension. As the pupils have an opportunity to re-read, to find the answers to the questions, the test measures factual comprehension in careful reading. As the responses to the questions are given as "yes" or "no," by mere chance guessing of the pupils the average score would be fifty per cent. The folder of directions gives the directions for getting the index of comprehension, as follows:

If a child wrote "Yes" (or "No") to every question he would have fifty per cent of his answers right. The significant feature of his answers is the relation the difference between the right and wrong answers bears to the right answers. This will be called "The Index of Comprehension." It is found as follows: Subtract the wrong answers from the right answers. (If there are more wrong than right, find the difference and give it a negative sign.) Then divide the difference by the number of right answers, carrying the results to three places and keeping two. (To the nearest whole per cent.) Most scores will fall between ten and sixty questions right and the index of comprehension between one hundred per cent and seventy-five per cent.

Comments on the Courtis test. It is very much to be regretted that the mechanical make-up of the printing of the story in the Courtis test has marked differences from that to which pupils are accustomed. For the younger children this is likely to retard the rate. You will note, in the reproduction in Fig. 17, that the spacing between the words is unusually wide, and that the lines are closer together than the standards of the hygiene of printing require. These facts may explain why the Courtis rate standards are lower in the third and fourth grades than the Gray standards.

The Courtis test may be said to measure the rate of rapid silent-reading of a simple third- or fourth-grade story, and to measure the grasp of certain facts in the careful reading and re-reading of the story in sections. While the test appears to be an accurate measure of these types of reading rate and comprehension for the lower intermediate grades, there is serious question as to whether it is an adequate measure of rate in rapid narrative reading for the upper grades. Some teachers report that the manipulation of the pamphlets is confusing and that, on that account, it is not an accurate comprehension test. This objection can probably be overcome by a skillful handling of the test on the part of the teacher.

F. The Thorndike and the Thorndike-McCall Scales for Measuring the Understanding of Sentences

The Thorndike scale. In his scale, Thorndike does not attempt to measure rate. He measures comprehension in careful reading. The plan of the scale is illustrated in Fig. 18. The paragraph and the questions are both before the pupils for reading and re-reading as they are in the Monroe and in the Courtis tests, but there is no time limit as there is in the other two tests.

Part I and Part II are arranged on separate sheets. One objection to the tests has been the large size of the sheets. On the two sheets there is a total of seven sets of paragraphs and questions, arranged in order of difficulty. The usefulness of the Thorndike test to classroom teachers has been limited on account of the difficulty in determining the correctness of some answers, the complicated plan of scoring, and the large amount of time consumed in giving and scoring the test.

SET I. DIFFICULTY 4 (*approximately*)

Read this and then write the answers. Read it again if you need to.

John had two brothers who were both tall. Their names were Will and Fred. John's sister, who was short, was named Mary. John liked Fred better than either of the others. All of these children except Will had red hair. He had brown hair.

1. Was John's sister tall or short?.....
2. How many brothers had John?.....
3. What was his sister's name?.....

SET V. (*in part*). DIFFICULTY 8

Read this and then write the answers to 5, 6, 7, and 8. Read it again if you need to.

In Franklin, attendance upon school is required of every child between the ages of seven and fourteen on every day when school is in session unless the child is so ill as to be unable to go to school, or some person in his house is ill with a contagious disease, or the roads are impassable.

5. What is the general topic of the paragraph?.....
.....

6. How many cases are stated which make absence excusable?
.....

FIG. 18. SAMPLE EXERCISES OF THE THORNDIKE READING TESTS

The Thorndike-McCall scale.[1] The Thorndike-McCall scale has been issued in pamphlet form, and Form I consists of units which had previously been standardized in the Thorndike scale. The new test has a time limit of thirty minutes and a simple plan of scoring, and grade and age standards are provided in the manual of directions. It is a test of ability to comprehend increasingly more difficult material. This is in contrast to the Burgess test, which we have noted as a measure of the number of units, all on the same level of difficulty, read and comprehended accurately in a given time of five minutes.

[1] Read: McCall, William A. "A Uniform Method of Scale Construction"; in the *Teachers College Record* (January, 1921), vol. XXII, pp. 31–51.

Evaluation of the scale. The amount of time that it takes to give and score a test is a matter of practical consideration to the classroom teacher. The Thorndike-McCall test is time-consuming in comparison to the Monroe or the Burgess test. However, it has the advantage of measuring through a type of response which pupils use frequently in school, namely, questions and answers. The score depends upon the number of correct responses. Consequently, like the Burgess test, the scores do not reveal the degree of accuracy of the reading. The type of exercises represented in the scale is a valuable one to use as a training exercise in silent reading.

The Thorndike-McCall scale has the advantage of being issued in ten different forms, so a new test can be given each month to measure progress.

G. The Haggerty Reading Examinations

The test for the primary grades. The Haggerty-Noonan test, Sigma 1, is designed for grades one, two, and three. The samples in Fig. 19 illustrate the types of responses called for, the content, the size of type, and the length of line of the test. Unfortunately, the lines of the reading matter beyond the eighth exercise are too long, almost twice as long as the length of line best adapted to speed in reading.

As illustrated in the sample exercises, the test is progressive in difficulty, and consequently, like the Thorndike-McCall test, measures the ability of the pupil to comprehend increasingly more difficult material. As the score depends upon the number of exercises done correctly, it does not reveal the accuracy of the reading. The pupils are allowed exactly twenty minutes in which to indicate responses to as many of the twenty-five exercises as possible. The type of exercise is such that it takes less time to check up the pupil's paper than in the Thorndike-McCall test.

1. Put a tail on this pig.

(In this space is a picture of a wolf, a pig, and a kettle.)

Once a hungry wolf was about to eat a poor little pig.
The little pig jumped into a big kettle and saved herself just in time.

11. Put a line under the animal which was about to eat the pig.
12. Put a cross under the place where the pig hid.

FIG. 19. SAMPLE OF THE HAGGERTY-NOONAN READING EXAMINATION

Read this paragraph and then do what it says to do. Read it again if you need to.

But we are anxious to see the inside of this wonderful craft; so, after a few minutes in the turret, we go down the narrow hatchway into the boat itself. Here we are immediately struck by the amount of machinery everywhere and the neatness and compactness of everything. Behind the living room is the engine room. Here are two heavy oil engines for driving the boat on the surface, and a powerful motor for use when the boat is submerged. In another compartment there are storage batteries for supplying the electric current for the motors, lights, and cooking apparatus.

24. Draw a line under the one of these three words that shows what is described in this paragraph.

sailboat
aëroplane
submarine

25. Draw a line under the one of these three words that best shows the amount of machinery to be seen.

little
much
none

FIG. 19. SAMPLE OF THE HAGGERTY-NOONAN READING EXAMINATION

It is the only silent-reading test feasible for the first grade.

On the last page of the Haggerty-Noonan test booklet is Test 2, consisting of twenty questions to be answered by "Yes" or "No." The following are samples:

2. Can a hat walk?
3. Are men larger than boys?
20. Do convicts sometimes escape?

In case the pupil gets a larger number right than wrong, the score is the number right minus the number wrong. Otherwise, the score is zero. This is a simpler plan for grading this type of response-question test than the one used by Courtis and avoids the confusion of minus scores.

The Haggerty reading examinations for the intermediate and upper grades. Sigma 2, for the intermediate grades, is in preparation. Sigma 3, for the upper grades is now available. It consists of three tests. Test 1 is a vocabulary test, and Test 2 is a series of questions to be answered by "Yes" or "No." Both of these tests are very similar to exercises used in several of the intelligence tests. Test 3 is a series of seven paragraphs increasing in difficulty. The pupils are given twenty minutes to read and indicate as many correct responses as possible. The types of response used will be made clear by reproducing the first unit of the test. The size of the type has been reduced.

I

A carriage, drawn by four horses, dashed 'round the turn of the road. Within it, thrust partly out of the window, appeared the face of a little old man, with a skin as yellow as gold. He had a low forehead, small, sharp eyes puckered about with innumerable wrinkles, and very thin lips, which he made still thinner by pressing them forcibly together.

1. Underline the correct phrase:

The carriage was drawn by
- two mules
- a fancy team
- four horses
- a gray mare

2. Check the sentence which is true:

a.— The carriage was slowly drawn around the turn.
b.— The carriage was turned over as it rounded the turn.
c.— The carriage was hurried violently around the turn.

3. Check the false statements:

a.— The man was large and bony.
b.— The man was middle-aged.
c.— The man was little and old.

The advantage of the type of response used by Haggerty, as well as the types used by Monroe and Burgess, in comparison to written answers to questions, used by Thorndike-McCall, is that language-expression difficulties are eliminated.

4. Vocabulary Tests

One of the factors in silent reading accomplishment is attainment in a ready grasp of a meaning vocabulary. It is important that this element should be measured to determine the relative efficiency of a class, a school, or a system of schools. It should also be considered in measuring the results of teaching methods and devices. Oftentimes an individual pupil in need of special diagnosis should be given a vocabulary test. Three vocabulary tests will be now discussed.

The Thorndike Visual Vocabulary Scales. Thorndike has devised a visual vocabulary test issued in four forms. One of these forms is reproduced in reduced size in Fig. 20. In addition there is a preliminary test to be used first to make sure the pupils understand just what to do in taking the test. The manual of directions explains the administering of the test, the calculation of the scores, and the interpretation of the scores. The following directions taken from

THORNDIKE READING SCALE B. WORD KNOWLEDGE OR VISUAL VOCABULARY (*X Series*)

Name _____ School _____ When is your next birthday? _____

How old will you be? _____ Are you a boy or a girl? _____

In what grade are you? _____ Teacher's name _____

Write the letter W under every word that means something about *war* or *fighting*.
Write the letter B under every word that means something about *business* or *money*.
Write the letters CHU under every word that means something about *church* or *religion*.
Write the letter R under every word like *father* or *wife* that means something about *relatives* or the *family*.
Write the letters COL under every word that means a *color*.
Write the letter T under every word like *now* or *then* that means something to do with *time*.
Write the letter D under every word like *here* or *north* that means something about *distance* or *direction* or *location*.
Write the letter N under every word like *ten* or *much* that means something about *number* or *quantity*.

4x. camp, flag, west, mother, two, general, green, troops, south, fort

4½x. gray, cousin, pink, uncle, yellow, hour, pay, aunt, early, commander

5x. marriage, defeat, many, afternoon, guard, buy, captive, military, relation, late

6x. hymn, defend, across, merchant, noon, forty, conquer, dagger, profit, tuesday

6½x. month, dozen, fortress, cavalry, tax, bishop, below, october, million, owe

7x. fortification, ownership, there, year, june, half, scarlet, soon, november, beneath

7½x. during, forward, edge, recruit, orphan, some, rampart, instant, lilac, several

8x. overhanging, cardinal, future, plural, where, numeral, immediate, each, exterior, plurality

8½x. odd, recent, installment, protestantism, seldom, canteen, emerald, parallel, century, opposite

9x. bounding, previous, strategy, from, encircling, middle, tawny, formerly, thereabouts, perpendicular

9½x. adjutant, buckler, margin, kinship, creed, monachism, negotiable, every, monasticism, gradual

10x. fawn, rarely, finance, insolvent, minority, eternal, turquoise, rebate, transverse, quadruple

FIG. 20. THE THORNDIKE VISUAL VOCABULARY SCALE

(Copyright, 1916-1920, by Teachers College, Columbia University, New York.)

the pamphlet of directions may be suggestive to teachers and supervisors of reading: [1]

It would be very foolish for any one to undertake to drill pupils upon the meanings of words in order to obtain a higher score on this test, especially to undertake to teach them the particular words included in the Thorndike scales. Such a procedure would be equivalent to teaching a person who is going to be weighed, how to grasp the weighing machine and to exert the strength of his muscles to increase the pressure on the platform of the scales. The fact that one was able to exert greater pressure than his mere weight would not prove that he had increased his weight, any more than the teaching of pupils how to identify the words of these scales would prove that they had thereby increased their word-knowledge.

A low score in the visual vocabulary scales may be the result of lack of experience in life, it may be the result of inadequate explanations of the experiences the child has had, or it may be the result of some entirely different factors. The teacher of reading, or of arithmetic, or of geography may have assumed, without warrant, that the words of the textbook were understood by the pupils. In such a case, verbal memory may have enabled the pupil to make satisfactory responses to the questions asked in class, but may be entirely inadequate to enable him to identify the words when they appear on a scale such as the one here discussed. The purpose of these scales is to measure the results actually being obtained rather than to indicate anything at all about what causes these results or to improve them.

Teachers who desire to check up the difficulty of the words appearing in the geography, arithmetic, history, or other textbooks used by their pupils may easily do so by making up a test blank in which every second word is from an appropriate difficulty level of the Thorndike scales, with the words from the textbook sandwiched in between the words of known difficulty. Care should be taken in such a case to make certain that the textbook words are such as could be properly classified under one of the instructions appearing at the top of the test sheet. The results should be tabulated on the form of scoring sheet shown on page 8. To prove

[1] Trabue, M. R., Director of the Bureau of Educational Service, Teachers College, Columbia University, Bulletin, Eleventh Series, No. 13. (February, 1920.)

that the words of the textbook are not too difficult, the percentage of errors on the textbook words should be smaller than the percentage of errors on the scale words, if the scale words were chosen from lines having the difficulty values corresponding to the standard score of the grade as shown on page 15.

The most common misunderstanding of the results of measurements of ability in reading, or in any other subject, is to assume that measuring the ability of a class or of a pupil will improve that ability. Measuring the height of a child does not make him taller, nor does measuring his word-knowledge increase his vocabulary. The supervisor or teacher who measures a child and finds him under weight and not as tall as he should be, may perhaps inform the pupil or his parents of the kind of food that would be most healthful and most likely to overcome the deficiency, but the measuring in itself will not *increase* either the height or the weight. It merely *reveals* more exactly the size of the pupil. Measuring word-knowledge reveals the size of the reading vocabulary in the same way. The teacher may know or discover the causes of the present size of vocabulary, and she may discover ways of increasing the vocabulary in the future, but the measurement itself should not be expected to enlarge that vocabulary. Measurement of results and the production of results are two distinct processes.

The Holley Sentence Vocabulary Scale. The reproduction in reduced size of the general instructions, and the first ten and the last ten units, in Fig. 21, will give the reader an adequate idea of the Holley Sentence Vocabulary Scale. The standards are in terms of mental age. This type of test is commonly used in intelligence tests, which are designed to measure the pupil's mental ability in mental-age units.

The Pressey-Skeel group test for measuring reading vocabulary in the first grade. It was observed, in the discussion of the Jones vocabulary test, that the amount of time consumed in giving an individual test limits its practical use very greatly. The Pressey-Skeel first-grade vocabulary test is printed in primer type and may be given to a large group at one time. The nature of the test will be

GENERAL INSTRUCTIONS

After telling the children not to read the papers, distribute the test sheets. Have each pupil fill in the blanks at the top. Then say: "Look at the directions while I read them to you."

DIRECTIONS: (To be read by the teacher and pupils together.) "Notice the sample sentence:

"Apples grow on . . . vines . . . roots . . grass . . . trees. The word 'trees' has a line under it because it is the word which makes a true sentence. Notice another sample sentence:

"People can see through . . . wood . . stone . . . glass . . . iron. What is the word that best completes the sentence? Draw a line under it. (Teacher should pause.) In the sentences below draw a line under the one of the four words in each row which makes a good sentence. Do not draw a line under more than one word for only one word in each set is right. If you cannot be sure, guess. When you finish, bring your paper to me. Do not hurry because you may use all the time you need. Begin."

SERIES 3A

1. A Gown is a	string	animal	dress	plant
2. An Orange is a	dress	animal	fruit	hornet
3. Envelopes are made for	letters	snakes	water	apples
4. Haste is	hurry	red	little	sweet
5. Scorch means to	cut	burn	bruise	turn
6. Straw grows from	trees	oats	fish	potatoes
7. To Tap is to	run	fall	knock	smile
8. Copper is used to make	grass	shirts	pennies	houses
9. A Bonfire usually burns	coal	oil	gas	trash
10. A Dungeon is	open	bright	heavy	dark
61. A Priceless book is	useless	invaluable	princely	excellent
62. To Bewail is to	applaud	lament	beware	laugh
63. A Peculiarity is a	circuit	debacle	singularity	uniformity
64. A Charter is a	map	mortgage	grant	blue-print
65. A Fen is a	upland	bushland	waste	marsh
66. To Embody is to	blend	repudiate	buoy	incorporate
67. A Promontory is a	promoter	incognito	foreboding	projection
68. To Tolerate is to	tax	multiply	record	permit
69. Exaltation is	intoxication	exhalation	elation	admonition
70. Avarice is shown by	egotism	altruism	covetousness	melancholy

FIG. 21. THE HOLLEY SENTENCE VOCABULARY SCALE (*in part*)

made clear to the reader by giving an excerpt from the report of the authors: [1]

The first five lines of Form A are as follows:

tl mz the unf pr
wx I sn en w
ol bux ts lz go
see elx bim ts osn
bul og he bu ln

The problem of the test is carefully developed through the first five lines which are used as examples; following these are the twenty-two lines of the test proper. The directions for Form A are to be given orally as follows:

Look at the first line! Who can see a real word in that line? What is the word? Yes, "the." What part of the line is it in? Yes, right in the middle. I want you to draw a line around the word "the" because it is the only *real* word in the line. The other groups of letters don't make words. Draw a line around "the."

Look at the next line! What is the real word? Yes, "I." Draw a line around "I" because it is the only real word in the line.

Look at the next line! What is the real word? Yes, "go." Draw a line around "go."

Look at the next line! What is the real word? Yes, "see." Draw a line around "see."

Look at the next line! What is the real word? Yes, "he." Draw a line around "he."

Now, every one attention! I want you to read over the rest of the lines on the page in the same way. In each line there is *just one real* word. You find the real word in each line, and then draw a line around it.

The children are allowed exactly three minutes after the directions are given for work on the test. In scoring, count only the lines in which the correct word, and nothing more, is marked; the score is simply this total of items correct. It should be added that *any* indication of the correct word — line around, line under, cross — is considered satisfactory; the child is not required to follow directions exactly, but only to show in some unmistakable way that he knows the word in question.

[1] Pressey, L. C., and Skeel, H. V. "A Group Test for Measuring Reading Vocabulary in the First Grade"; in the *Elementary School Journal* (December, 1920), vol. 21, pp. 304–09.

The value of a group vocabulary test in the primary grades. The authors of the Pressey-Skeel test have found that the results have a rather high correlation with the results obtained in giving the same words as an oral test in pronunciation. To what extent the ability to distinguish real words from nonsense syllables correlates with ability to read is not known. However, since it is important in the first grade to develop a sight recognition vocabulary, it would appear that this type of test would be helpful in determining definitely the amount of progress a pupil has made with reference to the sight vocabulary. Further studies along this line will no doubt be made in the near future.

An adequate equipment of reading tests. Caution should be given as to the danger of drawing conclusions from the results of one test, especially in the judging of any particular pupil. If only one test can be given, probably the Monroe test is the best general measure of silent-reading ability. The following outline may be helpful to teachers and supervisory officers in selecting an equipment of reading tests:

I. Group Tests
  1. Short time tests on amount done correctly
    a. Monroe. Reveals relation of rate and comprehension
    b. Burgess. Scores reveal the amount done correctly
  2. Long time difficulty tests
    a. Thorndike-McCall. Score reveals amount done correctly
    b. Haggerty. Reveals the amount done correctly (The only silent-reading test for the first and second grades. The upper-grade test includes a vocabulary test. Rather expensive)
  3. Tests in rapid narrative reading
    a. Courtis. Rate score in words per minute (Suitable for lower middle grades)

b. Stone Narrative-Reading Tests. Grades 3–9. The diagnostic chart a special feature

4. Vocabulary tests
   a. Pressey-Skeel. For first grade
   b. Thorndike. Tests ability of pupils to identify words by similarity of classification
   c. Holley. Commonly used as one item in measuring intelligence

II. Individual Tests

1. Gray Oral-Reading Test. An excellent instrument to use with special cases
2. Jones Vocabulary Test. Tests ability of pupils to pronounce primer words in lists. Good for testing a few pupils
3. Haggerty. Similar to the Jones, but shorter
4. Gray Silent-Reading Tests. Excellent for getting an accurate measure of rate on a certain type of material, with special cases

5. How Results are improved through the Use of Tests

A number of reports have been made and published showing how results in reading have been improved through the use of standardized tests.[1] By way of showing what may be accomplished, an account will be given here of the use of the Monroe tests in the school of which the writer is principal.

Reading tests as used in one school. In May, 1919,

[1] As good examples of such studies the following may be cited: Oberholtzer, E. E. "Testing the Efficiency of Reading in the Grades"; in *Elementary School Journal* (February, 1915), vol. 15, pp. 313–22; Waldo, K. D. "Testing Reading in the Sycamore Schools"; in *Elementary School Journal* (January, 1915), vol. 15, pp. 251–68; Gray, William S. "The Use of Tests in Improving Instruction"; in *Elementary School Journal* (October, 1918), vol. 19, pp. 121–42; Waldman, Bessie. "Definite Improvement of Reading Ability in a Fourth-Grade Class"; in *Elementary School Journal* (December, 1920), vol. 21, pp. 273–80; Zirbes, Laura. "Diagnostic Measurement as a Basis of Procedure"; in *Elementary School Journal* (March, 1918), vol. 18, pp. 505–22.

Form II of the Monroe tests was given to all pupils in the third grade and above, in the Gardenville School, in St. Louis. The results were tabulated and graphs were made, showing the relative standing of classes and grades in comparison to the standards calculated by Monroe from the results of testing several thousand pupils in each grade. The standard represents the median score of the grade. The median is about the same as the average. The results by grades for this test may be seen at a glance by referring to the graphs on page 256. Figure *a* shows that all the grades were above standard in rate. Figure *b* shows that all grades except the fourth were below standard in comprehension. The graphs also reveal that the higher grades were the highest above standard in rate, and the lowest below standard in comprehension.

The results shown by the test were made the basis of a teachers' meeting. In discussing the reasons why the classes as a general rule were above standard in rate and below in comprehension, it was concluded that this was due to carelessness, working too rapidly, failure to check up or to verify answers, and to a lack of training in the type of comprehension involved. It was made clear that the problem of the school, especially above the fourth grade, was to work for accurate comprehension in reading and study under the stimulus of a time limit. During the last school year a number of meetings have been held for considering the reading problems. Two were given over to the problem of getting pupils to check up their answers in careful reading by verifying through re-reading as much as was necessary. Exercises for developing facility in quick, ready grasp of a fact or relationship expressed, and for developing the habit of checking up quickly and accurately, were formulated and used in the rooms.

The test repeated a year later. Figures *c* and *d* show the

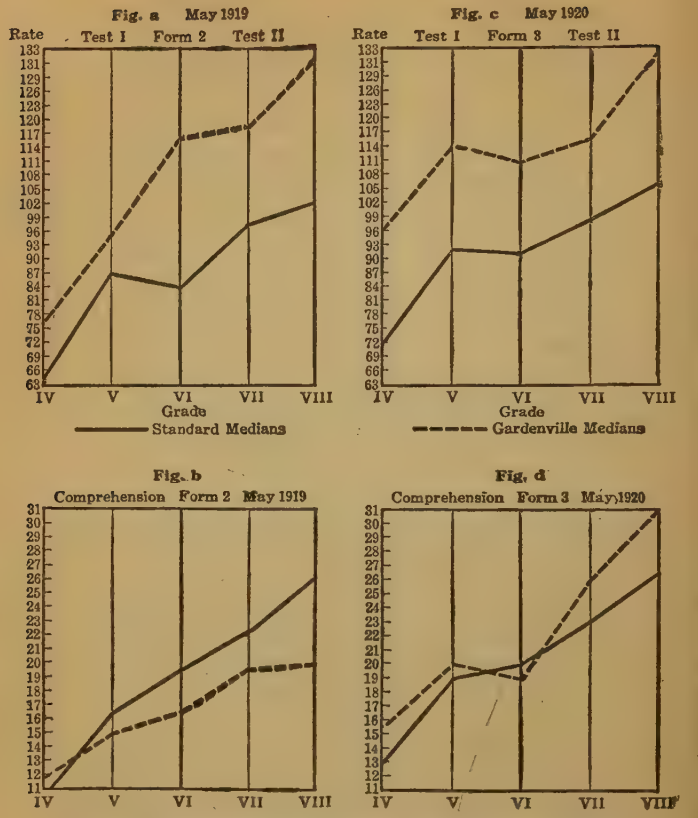


FIG. 22. GRAPHS FOR THE MONROE SILENT-READING TEST

Comparing results in rate and comprehension, May, 1919, and May, 1920, Gardenville School, St. Louis, Missouri

results of the Monroe tests in the same school and grades for May, 1920. As the content of this second test was new, there was no possibility of previous experience with the same exercises influencing the result. Figure *c* shows that the record of the school in rate in comparison to the

standard is about the same as it was a year ago, but with a more marked improvement in the lower grades. All the grades are shown as being considerably above the standard.

Figure *d* shows that all of the grades have made a better record in comprehension than was made in 1919. Comparing Figures *b* and *d*, we see that the seventh and eighth grades have a remarkably better record in the comprehension test in 1920 than in 1919. Instead of being considerably below the standard, they are considerably above. The sixth grade is nearer to the standard, but still slightly below. The fifth grade has risen from a position below the standard to a position slightly above. The fourth grade is somewhat further above the standard than formerly. For the school there has been a remarkable gain in comprehension, with no loss in rate except a slight one in the sixth grade.

The question naturally arises as to why the sixth grade is the only one below the standard in comprehension. Its rate in relation to the standard is about the same as the fourth, the fifth, and the eighth grades, and slightly better than the seventh. The reading in the seventh and eighth grades for the preceding year was taught by one teacher in a departmental unit of four rooms. This teacher is one of exceptional training and ability. The other teachers of the unit have also given attention to the training of the pupils in reading material of their respective subjects. In the sixth grade the reading has not been departmentalized, and each of the sixth-grade classes has been taught for a part of the year by comparatively inexperienced teachers. These two facts probably partly explain why the sixth grade has a relatively lower standing than the seventh and eighth. But the same conditions apply to the fifth grade, which has made considerably more improvement than the sixth. In looking forward to the coming year's work, it is

important that a study should be made of the record of the classes and of the individuals in the sixth grade, and that the teachers and principal confer as to the best means of strengthening this evident weakness.

Conclusions from this study. Scientific-standardized reading tests should be given regularly toward the beginning, about the middle, and toward the close of the school year, and the results should be graphed and used by the principal and supervisor as a means of improving the efficiency of the supervision of the teaching of reading. The results of these tests may well be made the basis of group conferences of teachers, with a view to coöperative efforts to improve results. The individual teachers should make careful analysis of the showing of their classes on each particular test. Interpretation of the results should lead to improved plans for classifying and instructing the pupils in accordance with individual abilities, attainments, and needs. Teachers should learn to diagnose individual cases of weakness, and provide suitable remedial treatment.

6. Tests with Material at Hand

Testing neglected. While teachers as a rule give tests or examinations in such school subjects as arithmetic, geography, and history, in many instances they do not give tests on the comprehension of reading material. The Cleveland Survey [1] showed that the failures in reading in the first two grades were very much more numerous than the failures in arithmetic, but above the second grade the failures in arithmetic were very much more numerous than the failures in reading. The greatest differences in this respect were in the intermediate grades. The tests in reading and in arithmetic, given as a part of the Survey,

[1] Judd, Charles H. *Measuring the Work of the Public Schools.*

proved that the intermediate grades had not succeeded better in reading than in arithmetic. No doubt the teachers had been checking up results in arithmetic in an objective form, but had not been checking up the results of the reading instruction. In addition to giving standardized tests two or three times a year, the pupils should be tested at least every five or six weeks with tests on rate and comprehension in silent reading formulated by the teacher.

It requires quite as much training and skill to give good tests or examinations as it does to do good teaching. One of the important results that should come from the use of scientific-standardized tests is the improvement of the tests and examinations given by the teacher. The writer does not believe that long-drawn-out, formal, set examinations are advisable in the grades, but he does believe that the results of teaching in all subjects should be checked up, in so far as is possible, in an objective form. As a matter of fact, pupils like tests of the right sort. Classroom tests in reading should be both pleasurable and profitable. By studying the theory and content, method and purpose of scientific tests, the teacher will be better able to make and give tests that will be more accurate in measuring results, and at the same time be much more acceptable to the pupils.[1]

An improvised second-grade silent-reading test. The following is a second-grade silent-reading test, which Miss Agnes Dunsford has formulated on a fable in one of the supplementary reading books, and which has been used with succeeding classes for several terms and has been in consequence developed into a fairly reliable standard.

[1] An excellent book for teachers to read, in this connection, is Monroe, W. S., *Measuring the Results of Teaching.* Houghton Mifflin Company, 1918.

THE ANT AND THE DOVE

1. What happened to the ant?
2. What did the ant do then?
3. What did the dove throw down to the ant?
4. What did the ant say?
5. A few days later what was the dove doing?
6. What was the man going to do to the dove?
7. What did the ant do to the man?
8. What did the man do then?
9. What did the dove then do?
10. What did the dove say to the ant?

In applying this test the teacher tells the pupils to read the story through at their usual rate of reading without stopping to re-read or ask about words. They are told that they will be given a set of questions to answer. When the child completes the reading, he places his book in the desk and waits until all have finished. Then the pupils write the answers to questions given by the teacher. In this way the teacher gets a fair idea as to the rate at which the pupils read and observes their reading with reference to vocalization, lip-movement, finger pointing, etc.

This teacher reports that this device has aided her in judging the silent-reading ability of her pupils more accurately. After the papers are graded, they are handed back to the pupils during a follow-up lesson on the fable. The pupils re-read it, and discuss the questions and answers. In this way the comprehension of the pupils is improved and the experiential value of the fable increased.

Tests provided for in readers. Some of the newer reading texts are making a beginning in providing tests as a regular part of the reading instruction. The *New Barnes Second Reader* has twelve test lessons. Two of these lessons are reproduced here to illustrate the two types of elements in comprehension which they test.

THE YOUNG ROBIN

A young robin lived in an apple-tree near the door of a house. He wanted to go into the house and hop on the floor.

"No, no!" said his mother,
"You must stay with me.
Little birds are safer
Sitting in a tree."

Young robin gave his tail a fling, and said, "I don't care." Then down he flew, and the cat caught him before he had time to wink.

"Oh," he cried, "I'm sorry,
But I didn't think."

The following suggestions and directions from the *Teacher's Manual* show how to use such a story as a reading test:

Rate of silent reading: Eighty per cent of the class will read the story silently in less than seventy-five seconds. A few pupils will finish in forty-five seconds or less, several may take longer than the indicated maximum.

For this test the pupils should be supplied with pencils and paper.

At a signal from the teacher, the pupils, having been directed to find the page, begin the reading together.

The teacher will quietly note the rate of the most rapid readers and the slower ones. When all pupils have finished the reading, as indicated by closed books, the teacher proceeds to ask questions and directs the pupils to write the answers. Ample time must be allowed for writing the answers.

Questions

1. Write the name of the bird you have read about.
2. Write the words that tell where he lived.
3. Write the words that tell where he wanted to go.
4. Write the first word his mother said to him about it.
5. Write the three words the young robin answered.
6. Write the words that tell what the young robin did then.
7. Write the name of the animal that caught him.
8. Write the sentence that tells why he did n't mind his mother.

After the papers are collected, a few pupils will read the selection to the class.

By keeping a record of the time required for each pupil to read the lesson silently, the teacher may obtain the average speed of her class in silent reading.

By rating her class on the answers to the questions, she may obtain some idea of the ability of each child to interpret thought from silent reading. The score of the individual pupil as well as the class score may thus be obtained if the teacher desires either. These may be of value in noting the progress of the class from time to time in rapidity and accuracy.

The questions, with the exception of the last one, it will be noted, are purely factual. The last question involves selective thinking, or reasoning. This would probably be a more difficult question than the others. No scheme of grading or scoring is given, as should be to make the plan complete. This lesson tests in a rough way the rate of reading, and tests principally the factual element in comprehension.

The second test lesson to be reproduced is as follows:

GUESS ITS NAME

I am thinking of something that is good to drink. We could not live without it. It has no taste. It has no color. We can see through it.

It comes from the rivers and lakes. It comes from springs.

We cook with it. It makes us sweet and clean. It keeps our houses sweet and clean.

In winter we skate on it. Fish live in it. Insects like it. Nothing could live without it.

Write its name.

In this lesson rate is tested in the same way as in the preceding one. The comprehension of the essential total meaning of the unit is tested. Such a selection is an excellent one for testing this element of comprehension.

One other lesson of the same type is given entitled, "Guess What It Is." It tells about the nut. The other

test lessons are similar to the first one, merely testing the comprehension of the facts.

The Bolenius Readers tests. *The Boys' and Girls' Readers*, for the fourth, fifth, and sixth grades, by Emma Miller Bolenius,[1] provide regular tests in silent reading. The *Teachers' Manual* provides for the use of five selections in each book for testing. Detailed directions for giving the tests are stated. Five factual questions are listed for each test. The fable and the short tale is the type of unit used for test lessons.

The following, from the *Sixth Reader*, is typical of the tests:

THE FOOLISH BRAHMIN

1. What did the Brahmin want?	(A sheep)
2. Who had the dog?	(Three rogues)
3. Who bought the dog?	(The Brahmin)
4. What did he think it was?	(A sheep)
5. What did he pay for it?	(A measure of rice and a pot of ghee)

The following scheme for scoring is given in the *Manual:*

All questions correct	A
One question wrong	B
Two questions wrong	C
Three questions wrong	D
Four questions wrong	E
Five questions wrong	F

Evaluation of the Bolenius tests. Tests like the above have the following advantages:

1. The questions are clear and definite, and consequently do not admit of misinterpretations by pupils or teachers.
2. There can be but one correct answer, permitting accurate, easy, and rapid scoring.

[1] Published by Houghton Mifflin Company, 1920.

3. The questions are of about equal difficulty, and therefore are adapted to a simple scoring plan.
4. The scheme of rating the papers is simple, economical in time, and sufficiently accurate for classroom purposes.

These readers have made a distinct step forward in helping teachers to check up results in silent reading. In each test a definite rate score in terms of the number of words read in a minute is secured. Rate standards are provided, and teachers are encouraged to have the pupils know how their rates compare with the standard for their grade. The *Manual* gives valuable suggestions on what we can learn from a test, on diagnosis and drill, on the spur of publicity of individual scores, on appealing to class pride, and on schemes for class charts.

The tests are limited to one element in comprehension. The questions merely require a reproduction of a fact. There is no test of ability to do selective thinking, to reason, or to perceive relationships. There is no test of the pupil's ability to grasp the essential total meaning or effect of a unit. The comprehension of the organization of a unit is not tested. The author has done well to limit a particular test to one element of comprehension. The wide-awake teacher will no doubt devise tests for the other elements of comprehension.

Difficulties in testing problematical thinking in reading. Comprehension of the factual element in reading is, of course, the easiest to test. The grasp of the essential total meaning or effect of a unit is the next in order of difficulty. Exercises from the Monroe tests, from the Haggerty-Noonan tests, and from the *New Barnes Second Reader* have been given to illustrate tests of this type.

So far no tests have been devised to test the pupil's comprehension of the organization of the unit. Exercises from

the Thorndike Scale and from the Haggerty Reading Examination, Sigma 3, have been given to show how to test the pupil's ability to do selective thinking, or reasoning, in answering a problem question. Testing this element in comprehension is much more difficult than testing mere knowledge of specific facts. The difficulties which teachers seem to have in testing problematic thinking in silent reading may be summarized as follows:

1. To word problem questions or exercises so that they admit of only one interpretation.
2. To secure a wording so the question can be answered correctly only by responding with a certain idea or thought.
3. To secure a number of problems within the average ability of the class, not too difficult and not too easy.
4. To avoid using the question requiring for the answer a choice between two alternatives unless all the questions are of this type, and a special method of calculating the index of comprehension is used.
5. To select a unit suitable to a relational-comprehension test.

I. A fourth-grade silent-reading test

The above principles will be made more concrete by applying them in a critical evaluation of the following relational comprehension test, used by one of the best teachers the writer has ever known, and based on the story of "The Emperor's New Clothes," by Hans Christian Andersen, in *The Riverside Fourth Reader*. The story reads as follows:

THE EMPEROR'S NEW CLOTHES

Many years ago there lived an Emperor, who thought so very much of grand new clothes that he spent all his money upon them, that he might be very fine. He did not care about his soldiers;

he did not care to see the play, or to drive in the woods, except to show his new clothes. He had a coat for every hour of the day; and just as they say of a king, "He is in council," so they always said of him, "The Emperor is in the clothes-closet."

In the great city in which he lived it was always very merry. Every day came many strangers. One day two rogues came. They gave themselves out as weavers, and said they knew how to weave the finest stuff any one could fancy. Not only were their colors and patterns, they said, very beautiful, but the clothes made of the stuff had this wonderful quality — they could not be seen by any one who was unfit for the office he held, or was too stupid for anything.

"Those would be capital clothes!" thought the Emperor. "If I wore those, I should be able to find out what men in my empire were not fit for the places they have; I could tell the clever from the dunces. Yes, the stuff must be woven for me at once!" And he gave the two rogues a great deal of cash in hand, that they might begin their work without delay.

As for them, they put up two looms, and made as if they were working; but they had nothing at all on their looms. They at once called for the finest silk and the costliest gold. This they put into their own pockets, and worked at the empty looms till late into the night.

"I should like to know how far they have got on with the stuff," thought the Emperor. But he felt quite uneasy when he thought that one who was stupid or not fit for his office could not see it. He believed, indeed, that he had nothing to fear for himself; still, he thought he had better first send some one else to see how matters stood. All the people in the city knew what peculiar power the stuff had, and all were anxious to see how bad or how stupid their neighbors were.

"I will send my honest old Minister to the weavers," thought the Emperor. "He can judge best how the stuff looks; for he has sense, and no one knows his place better than he."

Now the good old Minister went out into the hall where the two rogues sat working at the empty looms.

"Mercy on us!" thought the old Minister, and he opened his eyes wide. "I cannot see anything at all!" But he did not say this.

Both the rogues begged him to come nearer, and asked if the colors and the patterns were not pretty. Then they pointed to

the empty loom, and the poor old Minister went on opening his eyes; but he could see nothing, for there was nothing.

"Mercy!" thought he, "suppose I am really stupid! I never thought that, and not a soul must know it. Suppose I am not fit for my office! No, it will never do for me to tell that I could not see the stuff."

"You don't say anything of it?" said one, as he went on weaving.

"Oh, it is charming — quite enchanting!" said the old Minister, as he peered through his glasses. "What a fine pattern, and what colors! Yes, I shall tell the Emperor that I am very much pleased with it."

"Well, we are glad of that," said both the weavers; and then they named the colors, and explained the strange pattern. The old Minister listened closely, that he might be able to repeat it when he should come to the Emperor. And he did so.

Now the rogues asked for more money, and silk and gold; they wanted it all for weaving. They put all into their own pockets, and not a thread was put upon the loom; but they kept on as before, and wove at the empty loom.

The Emperor soon sent another honest officer of the court to see how the weaving was going on, and if the stuff would soon be ready. He fared just like the first: he looked and looked; but, as there was nothing to be seen but the empty looms, he could see nothing.

"Is not that a pretty piece of stuff?" asked the two rogues; and they showed and made clear the handsome pattern which was not there at all.

"I am not stupid!" thought the man; "it must be my good office, for which I am not fit. That would be queer enough, but I must not let it be noticed." And so he praised the stuff which he did not see, and said how pleased he was with the beautiful colors and the charming pattern. "Yes, it is enchanting," he told the Emperor.

All the people in the town talked of the gorgeous stuff.

Now, the Emperor wished to see it himself while it was still upon the loom. With a whole crowd of chosen men, among whom were also the two honest statesmen who had already been there, he went to the two cunning rogues, who were weaving with might and main, without fiber or thread.

"Is not that splendid?" said the two honest statesmen. "Does Your Majesty see what a pattern it has and what colors?" And

then they pointed to the empty loom, for they thought that the others could see the stuff.

"What's this?" thought the Emperor. "I can see nothing at all! This is terrible. Am I stupid? Am I not fit to be Emperor? That would be the most dreadful thing that could happen to me.

"Oh, it is very pretty," he said aloud. "It has my highest approval." And he nodded in a contented way, and gazed at the empty loom; for he would not say that he saw nothing.

The whole crowd that he had with him looked and looked, but they got nothing more out of it than all the rest; but, like the Emperor, they said, "Oh, that is very pretty!" and they begged him to have some clothes made of this new, pretty stuff, and to wear them for the first time in the great procession that was soon to take place. "It is splendid, excellent!" went from mouth to mouth, and they all were like one person in the way they talked.

The Emperor gave each of the rogues a ribbon to wear in his buttonhole, and gave them the title of Imperial Court Weavers.

The whole night before the morning on which the procession was to take place, the rogues were up and kept more than sixteen candles burning. The people could see that they were hard at work upon the Emperor's new clothes. They made believe take the stuff down from the loom; they made cuts in the air with great shears; they sewed with needles without thread; and at last they said:

"Now the clothes are ready!"

The Emperor came himself with his noblest cavaliers; and the two rogues lifted up one arm as if they were holding something, and said:

"See, here are the trousers! Here is the coat! Here is the cape!" and so on. "It is as light as a spider's web: one would think one had nothing on; but that is just the beauty of it."

"Yes," said all the cavaliers; but they could not see anything, for there was nothing.

"Will Your Imperial Majesty be so good as to take off your clothes?" said the rogues; "then we will put on you the new clothes, here, in front of the great mirror."

The Emperor took off his clothes, and the rogues pretended to put on him each new robe, as it was ready. They wrapped him about, and they tied and they buttoned, and they worked hard, and the Emperor turned round and round before the mirror.

"Oh, how well they look! how nicely they fit!" said all. "What a pattern! What colors! That *is* a splendid dress!"

"They are standing outside with the canopy which is to be borne above Your Majesty in the procession!" said the Head Master of the Ceremonies.

"Well, I am ready," replied the Emperor. "Does it not suit me well?" And then he turned again to the mirror, for he wanted it to look as if he saw all his finery.

The chamberlains, who were to carry the train, stooped down with their hands toward the floor, just as if they were picking up the train; then they held it up in the air. They did not dare to let it be seen that they could see nothing.

So the Emperor went in procession under the rich canopy, and all the people in the streets and at the windows said:

"How fine the Emperor's new clothes are! What a train he has to his mantle! How well it fits him!" No one would let it be seen that he could see nothing, for that would have shown that he was not fit for his office, or was very stupid. No clothes of the Emperor's had ever had such a success as these.

"But he has nothing on!" said a little child.

"Mercy on us! Just hear that innocent voice!" said his father; and one whispered to another what the child had said.

"He has nothing on; there's a little child here says he has nothing on."

"That's so! He has nothing on!" said the whole people at last.

That touched the Emperor, for it seemed to him that they were right; but he thought within himself, "I must go through with the procession." And so he held himself a little higher, and the chamberlains marched and carried the train, but there was no train.

Questions and answers. On this story the following questions were asked, and the type of answers accepted is shown opposite.

Questions	*Approximate Answers accepted by the Teacher*
1	
Par. 1. Why would n't the Emperor be prepared to meet trouble?	Thought too much about his clothes.

2

Par. 2. How were the officers likely to lose their positions?

Unfit for office or stupid.
If they could n't see the colors.
If they did n't see what the rogues were weaving.

3

Par. 3. In what way did the Emperor think the clothes would assist him?

He could tell who were stupid or unfit for work.
To see what men of his were fit for office.

4

Par. 4. How did the rogues deceive the king?

Asked all the time for gold and put it in their pockets.

5

Par. 5. Why was the king afraid to ask to see the goods himself?

He was afraid he was not fit for office.
He might not be fit to be Emperor.

6

Par. 6. Why was the old Minister the first one chosen to see the weaving?

He could judge the best and was honest.
He was honest and had sense.
He was an honest man.

7

Par. 10. What two questions did the Minister ask himself?

Am I stupid? and, Am I not fit for office?

8

Par. 10. Why did the Minister say he was pleased with the pattern?

Because he was afraid to say there was n't anything.
If he said no, he would not be fit for his office.

9

Par. 12. Why was the Minister able to describe the color and pattern to the Emperor?

Because he had to tell it to the king.
Because he would say the same thing the weavers said.
Because he listened to them.

10

Who was the only honest one in the story?

The child.

Criticism of the test and questions. The following comments on the above questions seem fair, and may be helpful to teachers in the formulation of test questions on other selections:

Question 1. This is a good question for the purpose of the test because it is clear and definite, requires reasoning, because teachers would not be likely to disagree as to the correct answer, and because it is of the proper difficulty. The answers do not show that the question was misinterpreted. Eight pupils gave correct answers, and nine incorrect ones.

Question 2. This is a poor question, because it is not closely enough related to the content of the paragraph, because teachers would disagree upon the interpretation of the question, and because there are too many possibly correct answers. Considering only the last objection, we find that only five out of the seventeen answers were counted as right.

Question 3. This question tests the pupil's perception of relationships, and can be answered only by giving one particular reason. Only three out of seventeen gave the incorrect answer. If worded in such a way as to make it slightly more difficult, it would be an excellent question.

Question 4. The answers of the pupils and the grading of the teacher show that this question involves a too complicated answer, if strictly graded, and that teachers are likely to disagree as to what would be an acceptable answer. Statements to the effect that looms were put up and that the rogues made as though they were weaving were counted wrong, while statements to the effect that they kept calling for more silk and gold and keeping it for themselves were accepted as correct. Probably both ideas are required for an adequate answer. The question does not call for a sufficiently definite and short answer.

Question 5. The answers show this to be a very good question. There were seven correct answers, and ten that were counted wrong.

Question 6. There are three ideas involved in this: he was honest, he had sense, and he was best able to judge. The teacher accepted the first as a correct answer, but did not accept either of the others unless the first was given also. There would probably be disagreement about what should be accepted as a correct answer. The question should be made more definite.

Question 7. This question calls for a mere reproduction of what was stated, and consequently does not involve relational comprehension.

Question 8. The wording of this question makes it too difficult, as is shown by the fact that only three out of the seventeen gave an acceptable answer. The idea involved is an excellent one. The question should be made more specific. Wherever possible substitute a more definite expression for "why."

Question 9. This question has the same weakness as the eighth.

Question 10. The answer to this question is not specifically stated in the reading. Therefore it involves selective thinking. Twelve gave correct answers, and five wrong ones.

A better test by the same teacher on the same selection. The following is a test formulated by the same teacher, after reading the preceding criticisms and after becoming familiar with the devices used in scientifically devised tests:

THE EMPEROR'S NEW CLOTHES

1. Indicate one reason why the Emperor would not be prepared to meet trouble.
   1. Because he did n't have an army
   2. " " was a coward
   3. " " his soldiers didn't drill
   4. " " thought only of his clothes
   5. " " was too old to fight
2. What was peculiar or unusual about the cloth?
3. Indicate the reason that tells why the Emperor was interested in the cloth.
   1. Because he wanted to look handsome
   2. " " thought it was beautiful
   3. " " always thinking of clothes
   4. " it would tell him who was fit for office
   5. " " was cheap
4. Indicate the one word below that tells the material the rogues used on the looms to weave this wonderful cloth.
   silk gold cotton nothing thread
5. Indicate the one reason below which tells why the Emperor was afraid to see the cloth himself.

1. Because he thought the rogues would hurt him
2. " " was too feeble
3. " " knew the rogues were magicians
4. " it might prove he was stupid
5. " " would blind him

6. Select and underline one of the following as a reason for sending the Minister to see the cloth.

The Minister was: old industrious sensible kind

7. Of what two things was the Minister afraid?
   1. That he was going blind
   2. " " " growing old
   3. " " " stupid
   4. " " " unfit for office
   5. " the rogues were not honest
8. Indicate the reason which tells why the Minister could describe the pattern and colors so well.
   1. Because he had seen it before
   2. " " " helped to weave it
   3. " " " listened closely
   4. " " wrote it on paper
9. Where did the rogues put the gold and silk that was given them?

on the looms in a chest in their pockets in the palace

10. Underline the word which tells who was the only honest one in the story

emperor minister child rogues officers

Score values of questions in reading tests. In the usual classroom examinations, the plan commonly followed in grading is to give each question the same weight or value. In treatises on scientific educational measurement, this plan has been criticized on the basis that the questions in such an examination are not of equal difficulty, and therefore should not be given equal weight in grading or scoring. In the construction of many scientifically made tests, the authors either selected units of equal difficulty or assigned values to the different units according to the difficulty of the unit. The method of calculating the degree of diffi-

culty and the value to be assigned to each unit on the basis of its difficulty is somewhat complicated.[1]

Tests that have different score values for the different units require more of the teacher's time in totaling the scores than do tests that assign the same value to each unit. If each exercise is given a value of one and the pupil's response counted right or wrong, there is much less likelihood of error in scoring and totaling the score. In the typical old-fashioned classroom examination, where no effort was made to see that the different questions were equal in difficulty or in time required in answering, it is evident that we have a very poor measuring instrument. But the more recent studies go to show that, in a set of ten or more questions or exercises formulated with a view of having them approximately equal in difficulty and in time required for answering, the units may be assigned equal score values without impairing the accuracy of the measuring instrument to any appreciable extent.

A teacher can refine her test in the following manner: After the test has been used with two or three classes, determine the number of times each question has been missed. In case the results show that a particular question is too easy or too difficult in comparison to the other questions, eliminate it, change it, or substitute another question that will be more likely to fill the requirements.

II. A fifth-grade silent-reading test of both rate and comprehension

For this test the following selection from *The Riverside Fifth Reader* was used:

The Magic Mask

There was once a great and powerful prince. He had hundreds of soldiers in his army, and with their help he had conquered vast

[1] Rugg, H. O. *Statistical Methods Applied to Education*, pp. 219–22. Houghton Mifflin Company, 1917.

strips of country, over which he ruled. He was wise as well as brave; but, though all men feared his iron will and respected his strong purpose, no one loved him. As he grew older, he became lonely and unhappy; and this made him sterner and colder, and more severe than ever. The lines about his mouth were hard and grim, there was a deep frown on his forehead, and his lips rarely smiled. (98)

Now it happened that in one of the cities over which he had come to rule was a beautiful princess whom he wished to have for his wife. He had watched her for many months as she went about among the people, and he knew that she was as good and kind as she was beautiful. But, because he always wore his armor and his heavy helmet when he rode through his dominions, she had never seen his face. (177)

The day came when he made up his mind that he would ask the lovely princess to come and live in his palace. He put on his royal robes and his golden coronet; but, when he looked at his reflection in the glass, he could see nothing but what would cause fear and dislike. His face looked hard and cruel and stern. He tried to smile; but it seemed an unnatural effort, and he quickly gave it up. Then a happy notion came to him. Sending for the court magician, he said to him: (271)

"Make for me a mask of the thinnest wax so that it will follow every line of my features, but paint it with your magic paints so that it will look kind and pleasant instead of fierce and stern. Fasten it upon my face so that I shall never have to take it off. Make it as handsome and attractive as your skill can suggest, and I will pay for it any price you choose to ask." (348)

"This I can do," said the court magician, "on one condition only. You must keep your own face in the same lines that I shall paint, or the mask will be ruined. One angry frown, one cruel smile will crack the mask and ruin it forever; nor can I replace it. Will you agree to this?" (404)

The prince had a strong will, and never in his life had he wanted anything so much as he now wanted the princess for his wife. (430)

"Yes," he said, "I agree. Tell me how I may keep the mask from cracking." (445)

"You must train yourself to think kindly thoughts," said the magician, "and, to do this, you must do kindly deeds. You must try to make your kingdom happy rather than great. Whenever you are angry, keep absolutely still until the feeling has gone away.

Try to think of ways to make your subjects happier and better. Build schools instead of forts, and hospitals instead of battleships. Be gracious and courteous to all men." (518)

So the wonderful mask was made; and when the prince put it on, no one would have guessed that it was not his true face. The lovely princess, indeed, could find no fault with it, and she came willingly to be his bride in his splendid palace. (565)

The months went on; and, though at first the magic mask was often in danger of being destroyed, the prince had been as good as his word, and no one had ever discovered that it was false. His subjects, it is true, wondered at his new gentleness and thoughtfulness; but they said, "It is the princess who has made him like herself." (627)

The prince, however, was not quite happy. When the princess smiled her approval of his forbearance and goodness, he used to wish that he had never deceived her with the magic mask. At last he could bear it no longer, and, summoning the magician, he bade him remove the false face. (678)

"If I do, Your Royal Highness," protested the magician, "I can never make another. You must wear your own face as long as you live." (703)

"Better so," cried the prince, "than to deceive one whose love and trust I value so greatly. Better even that she should despise me than that I should go on doing what is unworthy for her sake." (740)

Then the magician took off the mask, and the prince in fear and anguish of heart sought his reflection in the glass. As he looked, his eyes brightened and his lips curved into a radiant smile; for the ugly lines were gone, the frown had disappeared, and his face was moulded in the exact likeness of the mask he had worn so long. And, when he came into the presence of his wife, she saw only the familiar features of the prince she loved. (824)

Measuring the rate. At the end of two minutes a signal was given. At this each pupil marked the last word read, and then continued to complete the reading of the story. After finishing, each pupil put his book in the desk and waited until all had finished. Later, after the comprehension test had been tried, each pupil determined the number of words read by the aid of the numbers entered at the

end of each paragraph, and divided by two to get the number of words per minute. This number constituted the rate score.

Measuring the comprehension. For this a set of questions was formulated and tried with one class. A revised form was tried with another class in an effort to get a set of questions of about equal difficulty. A third form, which follows, was given to a room of forty pupils, and the value assigned to each question was approximately according to the difficulty of the questions.

Comprehension questions on "The Magic Mask." The numbers in parentheses following each question are the values finally determined upon for the question, the total of values for the paper being 100.

THE MAGIC MASK

1. Underline the one word below which best describes the face of the prince at the beginning of the story. (5)
   Good beautiful cruel sad serious kind
2. Underline the one reason below which tells why the prince did not want the princess to see his face. (5)
   (*a*) Because he wanted to hide his face
   (*b*) Because he was afraid she would not marry him
   (*c*) Because the princess was rich and powerful
   (*d*) Because the prince was shy and timid
3. Mention one thing the magician told the prince *not* to do to keep from ruining the mask. (15)
   The prince was told *not* to———————————
4. Mention one thing the prince was told to do to keep the mask from cracking. (15)
   He was told to———————————
5. Write two words used in the story to describe the princess.
   (*a*)————————(5) (*b*)————————(10)
6. Underline the one reason below that tells why the prince was not quite happy. (5)
   (*a*) Because he deceived the princess by wearing the mask
   (*b*) Because he had the mask taken off

(*c*) Because the princess was popular with the people
(*d*) Because he was rich and powerful

7. Whom did the people think had caused the great change in the prince? (10)———————————
8. Because he was not quite happy, what did he have the magician do in regard to the mask? (5)———————————
9. Underline the one of the words below which describes the face of the prince at the close of the story. (15)
   cruel good kind sad serious beautiful
10. Underline the one reason below which explains why the mask is called the *magic* mask. (10)
    (*a*) Because it had a winning face
    (*b*) Because no one could see the mask on the prince
    (*c*) Because it was a false face
    (*d*) Because the mask did not break

Summary of conclusions regarding testing in reading. From our study the following conclusions seem to be warranted:

1. Attainment in silent reading has not been checked up in an objective way as it should be. Occasional tests of rate and comprehension, devised by the teacher, should be given.
2. The usual classroom tests or examinations are seriously inaccurate as measurements of ability and attainment, (*a*) because teachers differ widely in grading the same set of papers, and (*b*) because the plan of assigning equal values to questions that vary widely in difficulty gives an inaccurate measure.
3. Classroom tests in comprehension may be improved, (*a*) by a clearer wording of questions; and (*b*) by using some of the types of responses used in scientific tests, such as checking one of a number of listed answers, placing a line or cross correctly on a drawing; (*c*) by using questions upon which there will be a minimum of disagreement in grading; and (*d*) by considering answers wholly right or wholly wrong.

4. A more accurate grading or scoring will be secured, (*a*) by having all the questions of equal difficulty, or (*b*) by assigning values to the questions according to difficulty.
5. It is sometimes better to separate the tests upon different phases of comprehension, such as the knowledge of the facts, the understanding of the rational relationships expressed, and the grasp of the central idea or the essential total meaning or effect.
6. Rate should be tested in terms of the number of words read per minute. Pupils should compare their rates with standard rates, and note progress from time to time. Rate tests should always be followed by some definite check on comprehension, to ensure that the pupils really do the reading reported.

7. Use of Reading Tests in Rural Schools

Standardized reading tests may be very economically used in rural schools, because all but the youngest pupils may be tested at the same time. The small number of pupils in a class makes it possible for the teacher to examine carefully the individual results for evidences of weaknesses. There is more opportunity for remedial treatment in accordance with individual needs. There is excellent opportunity in the one- or two-room school for grouping pupils, according to results shown by the tests, for training exercises in silent reading. The administrative problem of permitting a fifth-grade excellent reader to be grouped with eighth-grade readers of equal reading ability is easier in a rural school than in a graded school with one or more rooms for each grade.

But little work has as yet been done in measuring results in our rural schools. In so far as studies have been made,

it is very evident that rural schools are more in need of the teaching and testing of silent reading than are city schools. The following is a summary of conclusions drawn from a study in silent reading in the rural schools of Santa Clara County, California, made by Richard Zeidler,[1] and may be taken as typical of conditions which a more general use of standardized tests would in all probability reveal. Mr. Zeidler draws the following conclusions from his study:

1. The rural schools of this county fall below the standardized scores in reading, especially in the lower grades.
2. The rural schools in the county compare favorably with the city schools of San Jose in the rate of reading, but both fall below the standard.
3. The rural schools of the county fall below the San Jose schools in the number of points reproduced from the material read.
4. A great variation of ability is shown between individual pupils in every class and grade.
5. Progress from grade to grade is irregular, and even a very noticeable retardation occurs from the seventh to the eighth grade.
6. The one- and two-teacher schools do inferior work in reading, as compared with the larger schools, which are better organized.

FACTUAL QUESTIONS

1. Name the two elements measured by the Gray Oral-Reading Test.
2. Name four points to keep in mind in selecting a silent-reading test.
3. Name two vocabulary tests.
4. Name four group silent-reading tests discussed in this chapter.
5. Name a silent-reading test that measures rate of reading of the more rapid type.
6. Name two silent-reading tests that do not measure rate.
7. What does the Jones test measure?
8. What does the Thorndike Vocabulary Test measure?
9. Enumerate three difficulties that teachers have in framing questions for testing comprehension, other than mere factual comprehension.

[1] Zeidler, Richard. "Tests in Silent Reading in the Rural Schools of Santa Clara County, California"; in *Elementary School Journal* (September, 1916), vol. 17, pp. 55–62.

PROBLEMS FOR STUDY AND DISCUSSION

1. There are twenty points in the above set of questions. Give yourself a test, crediting 5 per cent for each point correct.
2. Why is rate an important factor in testing oral reading?
3. What reason might be advanced against using the Gray Oral-Reading Test regularly for classroom testing?
4. Devise a simple plan for a classroom test of oral reading that will be economical in time expenditure, fairly accurate, and that would provide data for follow-up remedial work.
5. What value do you place upon testing the ability to get the meaning from listening to oral reading?
6. Criticize the questions for the Gray Silent-Reading Test.
7. What are the two essential differences between the Monroe and the Courtis tests?
8. Discuss the advantages and disadvantages of the Burgess test.
9. Give an adverse criticism on the Monroe test. On the Courtis test. On the Thorndike-McCall test. On the Haggerty-Noonan test. On the Burgess test.
10. What is the essential difference between the Jones Vocabulary Test and the Thorndike Vocabulary Test?
11. Report upon the advantages you have noted in the use of standardized reading tests in your classroom or school.
12. In what respect is the Monroe test superior to the Courtis test as a measure of comprehension?
13. Discuss essential differences between scientific tests and the usual type of examination.
14. Is it possible to modify the usual type of classroom examination to conform more nearly to scientific tests? How? What are the chief difficulties in doing this?
15. Do you think the use of a story for testing purposes, such as "The Magic Mask," will be likely to be a hindrance to the child's appreciation of the story?
16. Of the group silent-reading tests discussed, which one is best adapted for use in a one-room rural school? Why?

NOTE: Since this chapter was written the author and Miss Lucile C. Murphy have devised a series of Narrative-Reading Scales for the middle and upper grades, which are published by the Public School Publishing Company, Bloomington, Illinois.

CHAPTER X

INDIVIDUAL DIFFERENCES, AND SPECIAL INDIVIDUAL AND GROUP INSTRUCTION

Individual differences in reading ability. The use of scientific tests, especially in connection with school surveys, has directed the attention of educators to the very great individual differences in reading ability within a grade or a class. In a very interesting and important volume on reading, Dr. Judd makes the following interesting observation [1] as to the individual differences in reading ability which recent studies have revealed:

> There are many pupils who are forward in their reading. In the second and third grades they show a power of comprehension and a rate which compare with those of many an upper-grade pupil.

1. Individual Differences among Sixth-Grade Pupils

A study of variability. The large variability to be found in almost any intermediate-grade class is clearly illustrated by the accompanying table (Table IV; see page 283), which shows the results of a test of the pupils of four sixth-grade classes, a total of eighty pupils.

What these tables show. The table for rate should be read as follows: In the sixth-grade first-quarter class, 1 pupil was in the 140–149 rate-group; in the second-quarter class, 1 pupil; in the third-quarter class, 9 pupils; and in the fourth-quarter class, 1 pupil — making a total of 12. Read-

[1] Judd, Charles H. *Reading. Its Nature and Development.* Chapter VIII deals with the problem of individual differences.

TABLE IV. SHOWING RECORDS OF FOUR SIXTH-GRADE CLASSES ON THE MONROE SILENT-READING TESTS, MAY, 1920

No. pupils								*No. pupils*						
Standard Medians Oct., 1920		*Rate*	*Quarter*				*Total*	*Comprehension*	*Quarter*				*Total*	*Standard Medians Oct., 1920*
Grade	*Rate*		1	2	3	4			1	2	3	4		*Score* *Grade*
		140–149	1	1	9	1	12	45–49	0	0	1	1	2	
VIII	133	130–139	0	0	0	0	0	40–44	0	0	0	0	0	
VII	130	120–129	4	1	1	3	9	35–39	0	0	2	1	3	
VI	116	110–119	1	2	5	4	12	30–34	1	0	0	0	1	28.2 VIII
		100–109	7	3	4	4	18	25–29	2	4	3	1	10	26.0 VII
V	98	90–99	1	3	2	3	9	20–24	5	4	8	6	23	18.1 VI
		80–89	4	3	3	3	13	15–19	7	3	6	6	22	17.2 V
IV	77	70–79	2	0	0	1	3	10–14	5	2	3	3	13	13.3 IV
III	63	60–69	1	2	0	1	4	5–9	1	2	1	2	6	8.3 III
		Total	21	15	24	20	80	Total	21	15	24	20	80	

ing down the column on rate we see that for the 60–69 group there was 1 first-quarter pupil, 2 second-quarter pupils, and 1 fourth-quarter pupil. Likewise, in the table for comprehension, in the 25–29 group there are 2 first-quarter pupils, 4 second-quarter pupils, 3 third-quarter pupils, and 1 fourth-quarter pupil. Studying the individual classes, we note that the pupils of the first quarter range from 140 to 60 in rate, and from 30 to 5 in comprehension.

The tables show a wide variability in attainment in both rate and comprehension in each of the four classes. The fourth-quarter class has the widest variation, considering both rate and comprehension. These four classes represent the pupils of two rooms. They constitute the complete sixth grade of the school. It will be noted that the attainment in rate ranges from third-grade attainment to above eighth-grade attainment. The comprehension ranges from

third-grade attainment to an attainment very much above eighth-grade attainment.

The question naturally arises as to what variability would be found within this group of eighty sixth-grade pupils, considering both rate and accuracy of comprehension. In about an hour's time the writer examined these eighty papers, and made the following grouping:

Group	*Number of pupils*
Rapid and Accurate (Rate, 113–140; Accuracy, 75–100 per cent)	8
Rapid and Inaccurate (Rate, 113–140; Accuracy, 60 per cent or below)	18
Medium in Rate, or Comprehension, or in both	36
Slow and Accurate (Rate, 0–80; Accuracy, 75–100 per cent)	8
Slow and Inaccurate (Rate, 0–80; Accuracy, 60 per cent or below)	10

Special classification for reading. In so far as one can judge from the data of one test, it is apparent that the pupils in this grade are in need of widely different methods of treatment in so far as this type of reading ability is involved. No doubt a great deal more could be accomplished in a month's time, in improving the rate and accuracy in reading of the pupils of this grade, by a special regrouping of the pupils than could be accomplished in the same time by maintaining the regular classification. Of course, additional data, including the teacher's judgment of the pupil, should be taken into consideration in making such a special reclassification. But, presuming the above grouping to be approximately correct for the type of reading represented in the Monroe test, the two teachers could regroup the pupils according to the above scheme and differentiate the content and the method of the reading to their great advantage. The group of eight very superior read-

ers could well be permitted to read independently for their own pleasure, or occasionally to work as a team and give a report of their reading, or a dramatization to the other groups. The group that is slow and accurate undoubtedly needs speed drills, and large amounts of the extensive type of reading. The group that is rapid and inaccurate needs training exercises for carefully checking comprehension. Those who are slow and inaccurate very likely need to be given simpler reading material, and to be instructed under methods more akin to the primary reading methods.

2. Special Grouping within a Room

Individual differences in rooms. In almost any graded school, sufficient individual differences in reading attainment will be found to justify a grouping different from that of the two regular classes in the room. To illustrate how this may be done an account will be given of how a two-class room of seventh-grade pupils and a two-class room of fourth-grade pupils were each reclassified into three groups for reading instruction.

It was thought that the grouping in the intermediate and upper grades should be done principally upon the basis of silent-reading accomplishment. Three factors were taken into account: the teacher's judgment, as indicated by the pupil's rating in reading as shown on the pupil's scholarship record; the pupil's scores in careful silent reading, as measured by the Monroe test; and the pupil's scores in more rapid silent reading, as measured by "The Magic Mask" test, described in the preceding chapter.

I. Two seventh-grade classes regrouped for reading

The seventh-grade room consisted of forty-seven pupils. The following gives an idea of the grouping of these, and of

the data used in making the regrouping. Only the scores for the highest and lowest pupil in each group are given.

TABLE V. DATA FOR REGROUPING TWO SEVENTH-GRADE CLASSES IN READING

Group	*Rank*	*Monroe Test*		*Magic Mask Test*		*Teacher's Grade*
		Rate	*Comp.*	*Rate*	*Comp.*	*a, b, c, d, e*
A	1	162	41	403	90	*c*
11 pupils	11	133	30	233	80	*a*
B	1	133	27	234	100	*c*
20 pupils	20	101	11	178	80	*c*
C	1	133	19	233	80	*d*
16 pupils	16	73	5	115	40	*c*

In the main, the rating one would give a pupil on the basis of the results of the two tests would be about the same as the teacher's rating made previous to the giving of the tests. But there are occasional exceptions, as are indicated in the tabulation above. For instance, by far the best pupil in the room, in so far as the tests indicate, was given a grade of *c*, or average, just a few weeks previously. Likewise, the poorest pupil in the room in the tests had been given a grade of *c* by the teacher, while a number of other pupils had been given *d* and one pupil *e*. In all cases where the rating by tests and the rating by the teacher differ considerably, special scrutiny should be given to the pupil's responses in recitation. In some cases check tests should be given.

Any special regrouping, as indicated in the above table

of results, should, of course, be subject to an easy shifting of pupils from one group to another as the future progress of the pupils seems to indicate as desirable. After several lessons it was evident that two or three of the pupils from the C group should be placed in the B group, and one or two shifted from the B group to the C group.

Classwork after regrouping. A brief account will be given of the plan of handling the classwork after the regrouping. The departmental program provides for two eighty-minute periods a week in reading for the room. Thirty minutes was given to each of the B and C groups, and twenty minutes to group A. During the sixty minutes that groups B and C were reciting, group A did individual reading or group preparation, in an unused room, for a dramatization or report to be rendered to the pupils of the other groups. This phase of the plan has been especially stimulating to the forward group, and has served to bring interesting examples of accomplishment before the backward group. The following is a partial list of the possible reading activities of a forward group of this type:

1. Individual reading of books and individual brief reports to the other pupils of the room, giving reasons for recommending a particular book to them.
2. Group reading of a story, and telling the story to the other pupils.
3. Group reading of a story, and dramatizing for the other pupils.
4. Group reading of a short play, and dramatic reading from the books for the entertainment of the other pupils.
5. Group reading of a book, each pupil reporting briefly upon a chapter or section to the other pupils.
6. Group work on illustrative projects, for exhibition during oral reading or reporting.

Most of the pupils in group C are slow readers, and inferior or poor in comprehension. In addition to training in

comprehension, this group is being given speed drills of the various types given in Chapter VIII. They have been given the Thorndike Visual Vocabulary Test and lessons for vocabulary training are being planned.

Very much easier material than that usually given seventh-grade pupils, too, was found necessary for this group. Material from *The Riverside Fifth Reader* (fifth grade) has proven to be very interesting, and quite difficult enough for experiential content lessons for this group. The Intermediate-Grade Series of *Lessons in Community and National Life* [1] have been used to good advantage for training in attacking study problems. An assignment containing a series of questions on the sections and paragraphs of the different lessons, similar in form to the one given on page 176, can be made up on any of these lessons to increase the interest in it and to aid in the comprehension of it. These *Lessons* are also very useful for silent-reading tests of an informational character.

II. Two fourth-grade classes regrouped for reading

The tabulation (Table VI; see page 289) shows a similar regrouping for a fourth-grade room of forty-one pupils, again only the scores for the highest and lowest pupil in each group being given.

Compare line one in the above tabulation, which is the record of the best reader in the room, with the last line, which is the record of the poorest reader. The former makes an average seventh-grade showing, while the latter is below a third-grade average. Such wide individual differences within a class make special individual or group instruction necessary in order to administer effectively to the individual needs of the pupils.

[1] See footnote, page 77.

TABLE VI. DATA FOR REGROUPING TWO FOURTH-GRADE CLASSES

Group	Rank	Monroe Test		Magic Mask Test		Teacher's Grade
		Rate	Comp.	Rate	Comp.	a, b, c, d, e
A 8 pupils	High	95	20.6	215	80	b
	Low	90	13.4	166	90	b
B 19 pupils	High	95	15.9	151	60	b
	Low	61	11.3	100	20	d
C 14 pupils	High	76	13.4	123	40	e
	Low	41	6.7	99	10	e

Needed treatment of the problem presented. The oral reading as well as the silent reading of this fourth-grade C group indicated that these pupils were still in the primary reading stage. Consequently, considerable amounts of oral reading and phonetic analysis should be done. There may be exceptional pupils in this group who will not be helped by oral reading. But all of the reports of special remedial instruction with this type of pupil indicate that the phonetic method quite generally proves helpful.

The objection is sometimes raised that it will be difficult to get interest in a group of this kind owing to the absence of those who respond readily. This is likely to be the case unless there is a radical readjustment of content and method. The writer observed this group in one of the most lively reading recitations he ever visited. The teacher had wisely secured a set of attractive second readers, and given the group the story of "Peter Rabbit" to read. There was no difficulty in arousing interest or enthusiasm

in the discussion that followed. It was interesting to observe that only one of these pupils had ever read this story before. The first essential with a group of this kind is to provide simple, easy, and interesting material. As the group improves in fluency in oral reading, the amount of silent reading may be increased. Training exercises in rate, in comprehension, and in vocabulary should be used frequently.

Group B of this fourth-grade room has passed beyond the primary reading stage. These pupils need only small amounts of oral reading. During one recitation period this group was carried well into a long story from Grimm, and during the following study period they completed reading it, a total of about eight thousand words. While some training exercises were given to this group, the experiential content type of silent reading predominated.

III. How to handle the reading in a specially regrouped second-grade room

In almost any second- or third-grade room, we shall find fluent oral readers with a ready grasp of the content. We shall also find the pupils who are more or less characteristic of the immature oral reader and who show little ability in getting thought from the printed page. Standing between these two groups will be a somewhat larger group of about normal attainment. A rearrangement of the pupils into these three groups makes it possible for the teacher to provide more effective reading activities, experiences, and training for each of these three types of pupils.

Using reading tests. While the teacher's judgment of the pupils will be the main factor in determining the group each child should be in, certain tests should be given to provide supplementary evidence, such as the Pressey group vocabulary test, and the Courtis, the Monroe, or the

Haggerty-Noonan silent-reading test. The Gray oral-reading test and the Gray " Tiny Tad " silent-reading test, both of which are individual tests, should be given to pupils particularly in need of special diagnostic study.

The reading work of the upper group. The upper group consists of those who have attained a smooth fluent oral reading. There should be a minimum of oral-reading experience and a maximum of silent-reading experience for this group. The following types of work are among those that are feasible.

1. Extensive rapid silent reading of long units and of books.
2. Careful silent reading of exercises requiring written response to fact questions and to problems.
3. Careful silent reading of exercises requiring a drawing, a construction, or a similar type of response.
4. Audience reading to the room preceded by group conference and practice.

This forward group is capable of profiting by more non-recitation individual and group activity than the other two groups, if the teacher uses the recitation time, allowed this group, mainly to direct and stimulate such activities. The result of this plan for the forward group will be of much greater educational value than the result for them under the usual two-class procedure.

The work of the middle group would be about that for the second grade in the chapter on the primary grades.

The work of the slow group. There will be a maximum of phonetic and oral-reading work with the slow group, with a variety of plans for building up meaning concepts for the printed words, phrases, and sentences. It will be necessary to study the individual deficiencies and apply suitable remedial treatment. Very easy simple reading material should be used until the pupils have improved in fluency in oral reading and a ready grasp of the content.

3. The Reading Problem in the Special or Ungraded Room

Many progressive school systems separate the seriously backward pupils from the regular classes, and place them in special or ungraded classes or rooms. Lack of ability to read is one of the reasons for pupils not being able to succeed in the content subjects. A large percentage of the pupils placed in ungraded classes because of failure to do the work of the regular classes are poor readers. The following is the record of some poor readers in an ungraded room:

Table VII. Record of Poor Readers in an Ungraded Room

Pupil No.	*Age*	*From Grade*	*Teacher's Grade*	*Standing as shown by tests*				
				Gray's	*Monroe*		*Magic Mask*	
				Oral R.	*Rate*	*Comp.*	*Rate*	*Comp.*
1	14	4A	poor	20	101	10	88	10
2	14	6A	inferior	0	29	4	48	10
3	12	4B	poor	35	54	8	124	0
4	13	5B	average	0	101	15	174	0
5	13	6B	inferior	20	43	10	66	50
6	13	4B	poor		54	10	112	70

Pupils 1 and 2 have speech defects which account for their inability to read orally. Pupil 5 was examined in the Psycho-Educational Clinic at the age of ten. He was reported as normal in intelligence, but as probably having visual aphasia, or word-blindness.[1] All of these pupils are in need of special expert training in reading.

[1] For an interesting account of cases of this type see Schmitt, Clara. "Congenital Word-Blindness, or Inability to Learn to Read"; in *Elementary School Journal* (May, 1918), vol. 18, pp. 680-700.

Remedial instruction. With over-aged pupils whose reading achievement is still in the primary stage, phonics and oral reading of easy material have been found to be helpful.[1] Some of the pupils whose records are given in Table VII have reached only first- or second-grade attainment in reading. It would not be advisable, though, to give them first and second readers. It will be better to use books with short sentences, printed somewhat on the order of a primer or first reader, but with a content of interest to older pupils. The following are some books of this type:

The Four Wonders; Cotton, Wool, Linen, Silk, Shilling. Rand McNally Company.
Weavers and Other Workers, Hall. Rand McNally Company.
Eskimo Stories, Smith. Rand McNally Company.
Stories of the United States for Young Readers. Ed. Pub. Co.

In addition to considerable amounts of phonics and oral reading, there should be a great deal of retelling of what is read and discussion of simple problems. Every effort should be made to find out the interests of such pupils and provide silent reading that will appeal to them. There should be plenty of easy, interesting material for silent reading. In the regular classes, these pupils have been attempting to read material far beyond their level of reading ability. Training exercises for increasing rate, improving

[1] The following references give perhaps the best help we have at the present time on methods of improving the reading of seriously backward and retarded pupils:

1. Judd, Charles H. *Reading; Its Nature and Development*, chap. v, "Special Experiments in the Training of Pupils."

2. Anderson, C. J., and Merton, Elda. "Remedial Work in Reading"; in *Elementary School Journal* (May and June, 1920), vol. 20, pp. 685–701, 772–91.

3. Gray, William S. "Individual Difficulties in Silent Reading in the Fourth, Fifth, and Sixth Grades"; in the *Twentieth Yearbook of the National Society for the Study of Education*, part II.

comprehension, and increasing the silent-reading vocabulary should be used.

Every effort possible should be made to provide specific purposes for reading. In the manual work, give the boy who is interested in making a mechanical toy the printed instructions and drawings, and let him try to work out the meaning of the reading matter.[1]

Types of remedial cases. Gray [2] describes five individual cases as illustrative of the general types of remedial cases.

1. A third-grade boy who was seriously retarded in all phases of reading.
2. A fluent oral reader in the fourth grade who comprehended nothing read silently.
3. A third-grade boy who was relatively strong in ability to interpret, but who was greatly retarded in the mechanics of reading.
4. A fifth-grade boy who read very slowly.
5. A rapid reader who neglected details.

Gray recommends that teachers who are beginning diagnostic work classify poor readers at first as follows:

1. Poor in all phases of reading.
2. Weak in mechanics of oral reading.
3. Poor in interpretation.
4. Slow in silent reading.
5. Neglectful of important details.

Specific causes of failure in reading. In the same study Gray discusses in detail fourteen possible causes of failure in reading as follows: inferior learning capacity, congenital word blindness, poor auditory memory, defective vision, a narrow span of recognition, ineffective eye-movement, inadequate training in phonics, inadequate attention to content,

[1] The following is an excellent book for this purpose: *The Boy's Book of Mechanical Models*, by William B. Stout. Little, Brown & Company.

[2] Gray, Wm. S. *Remedial Cases in Reading: Their Diagnosis and Treatment.* Department of Education, University of Chicago, June, 1922, 208 pp.

inadequate speaking vocabulary, a small meaning vocabulary, speech defects, lack of interest, guessing, and timidity.

Individual differences in rural schools. The principles of classification according to reading achievement, as developed in this chapter, may readily be applied in one-room rural schools. The reading work must necessarily be by small groups. The grouping need not be according to the regular grade grouping. The ungraded rural school has some advantage in this respect over the school of one or more rooms to a grade. A pupil who may be regularly counted as a fifth-grade pupil in the one-room school should be allowed to take reading with the seventh-grade group if a series of tests shows him to be of seventh-grade reading achievement.[1]

PROBLEMS FOR STUDY AND DISCUSSION

1. Explain what is meant by individual differences by giving some illustrative examples.
2. In regrouping an upper-grade room of pupils for reading instruction, why is it better to use silent-reading ability as a basis rather than oral reading?
3. Give arguments against grouping pupils according to ability.
   Give arguments for grouping pupils according to ability.
   What appears to be the main issue in the debate?
4. Why would one silent-reading test not be sufficient as a basis for grouping pupils for reading instruction?
5. Select three standardized reading tests that would give the best combined record to use as a basis for grouping third-grade pupils for reading instruction. For grouping eighth-grade pupils.
6. Rank your pupils in order of silent-reading ability. Then give them two silent-reading tests and rank them according to the results. Compare your subjective ranking with the objective ranking. In the cases of marked differences in ranking make a careful study of these pupils, and decide which of the rankings is the more nearly correct.
7. Write a brief summary of this chapter.

[1] For an interesting account of the use of tests in rural schools, see the following: "Using Standardized Tests in Rural Schools for Grading Purposes," by Supt. Samuel S. Brooks; in *Journal of Educational Research*, November, 1920.

SELECTED BIBLIOGRAPHY

Bolenius, Emma Miller. *Teachers' Manual for the Boys' and Girls' Readers.* Houghton Mifflin Company. 1919.

Has valuable suggestions on both silent and oral reading.

Briggs and Coffman. *Reading in Public Schools.* Roe Peterson Company. 1908.

In many respects the best special method book on reading, but the treatment of silent reading is entirely inadequate.

Burgess, May Ayres. *The Measurement of Silent Reading.* Russell Sage Foundation, New York. 1921.

A very important study, with the construction of a new scale.

Buswell, Guy T. *Fundamental Reading Habits: A Study of Their Development.* Department of Education, University of Chicago. June, 1922.

An interesting report of an extensive study of eye-movements.

Dunn, Fannie W. *Interest Factors in Primary Reading Material.* Teachers College, Columbia University, New York City. 1921.

A research study of special value to curriculum and textbook specialists.

Gray, William S. "Principles of Methods in Reading, as Derived from Scientific Investigation"; in *Eighteenth Yearbook of the National Society for the Study of Education,* part II. Public School Publishing Company, Bloomington, Ill. 1919.

The best brief summary of general principles without illustrative details. Contains latest findings on hygiene of mechanical make-up of readers.

Gray, William S. *Remedial Cases in Reading: Their Diagnosis and Treatment.* Department of Education, University of Chicago. June, 1922.

Haliburton, Margaret W., and Smith, Agnes G. *Teaching Poetry in the Grades.* Houghton Mifflin Company. 1911.

The best brief treatment. Has illustrative lessons for each grade.

Hosic, James F. *Emperical Studies in School Reading.* Teachers College, Columbia University, New York City. 1921.

An interesting research study that emphasizes the need of better methodology in school readers, involving larger emphasis on major values in reading selections with less attention to details.

Huey, Edmund B. *The Psychology and Pedagogy of Reading.* The Macmillan Company. 1908.

An excellent general treatment of silent reading based on the early scientific investigations.

Jenkins, Frances. *Reading in the Primary Grades.* Houghton Mifflin Company. 1915.

Judd, Charles H. *Reading: Its Nature and Development.* Supplementary Educational Monographs, vol. II, no. 4. Department of Education, University of Chicago. 1918.

Gives the results of a number of research workers. An excellent analysis of the underlying problems of reading instruction.

Judd, Charles H. *Silent Reading: A Study of Various Types.* Department of Education, University of Chicago. July, 1922.

Kendall, Calvin N., and Mirick, George A. *How to Teach the Fundamental Subjects,* chap. II. Houghton Mifflin Company. 1915.

MacClintock, P. L. *Literature in the Elementary School.* The University of Chicago Press. 1907.

The best treatment of the different types of literature and their use in the different grades of the elementary school.

McCall, William A. *How to Measure in Education.* The Macmillan Company. 1921.

National Society for the Study of Education. Report of the Society's Committee on Silent Reading, *Twentieth Yearbook,* part II. Public School Publishing Company, Bloomington, Ill. 1921.

O'Brien, John A. *Silent Reading.* The Macmillan Company. 1920.

An account of an extensive research study including a special method of training for speed development.

Parker, S. C. *How to Teach Beginning Reading.* Department of Education, University of Chicago. 1922.

The St. Louis School Survey, vol. II, part 4. Board of Education, St. Louis, Mo. 1916.

Gives the findings and recommendations as determined through the Gray Oral- and Silent-Reading Tests, and by classroom observations.

Watkins, Emma. *How to Teach Silent Reading to Beginners.* Lippincott. 1922.

Presents in detail a number of silent-reading lessons and projects suitable for use in the first and second grades.

Uhl, W. L. *Scientific Determination of the Content of the Elementary School Course in Reading.* University of Wisconsin Studies, Madison, Wis.

INDEX

Ability, to think logically, improving, 178; individual differences in reading, 282.
Accident prevention, need of reading material in, 77.
Action cards, 204.
Action, literature of, 138.
Action sentences and directions, 169.
Adventure, literature of, 138.
Æsthetic values, appreciation of, 82.
Aims, specific, 3; and methods in primary grades, 33; of instruction, in elementary school, summary, 37; in the intermediate grades, 71.
Amount and difficulty of literary selections, 76.
Analysis of narratives, 191.
Application of reading ability to everyday problems, 5.
Appreciation and rate in reading a story, 42; how to develop, 80–86; of poetry through oral reading, 35.
Appreciation of literature, 5, 80.
Appreciation lesson, general method, 84.
Articulation and recognition of printed words, improvement in, 25; and comprehension, 26; and rate in silent reading, 27.
Assignments, importance of care in making, 121; suggestions for definite, 122; in illustrative lesson, 148; in dramatization, 152; specimen for relational thinking, 176.
Association of meanings, in memorizing, 91.
Attainment, variability in the intermediate grades, 69; variability in upper grades, 74.
Audience reading, as an aim, 38; in the primary grades, 57; in the intermediate grades, 71, 72; in the upper grades, 78; types, 100–110; books for, 105, 106.
Barnes Primer, 170.
Barnes Second Reader, 58, 260.
Barr Diagnostic Test in American History, 181.
Beginning stage, problems of, 38.
"Bells, The," vocabulary lesson on, Poe's, 197.
Blackboard steps, 41, 43.
Bobbitt, Franklin, quoted, 67, 68, 74, 75.
Bolenius, Emma M., 88, 185, 186, 189, 192, 223.
Bolenius Readers tests, 263.
Boys' and Girls' Readers, 88, 185, 186, 189, 192, 223, 263.
Briggs and Coffman, 115, 150, 154, 192.
Bryant, Sara Cone, quoted, 155.
Burgess Scale, for measuring ability in silent-reading, 230.
Buswell, Dr., upon relation between oral and silent reading, 15.

Cards, flash-, 30, 214; for phrase-flashing, 56; third-grade drill, 204–206; paragraph, 214.
Cautions, in matter of developing appreciation, 85.
Cedar Rapids silent-reading exercises, 209.
Central thought, training to grasp, 193.
Charters, W. W., 81, 139.
Children's Classics in Dramatic Form, 106, 156.
Chubb, Percival, quoted, 76, 89.
Cobb, Irvin, quoted, 138.
Class use, books for extensive reading by grades, 140.
Classification of silent-reading lessons, 118; special, 284.
Community life, readings in, 77.
Comprehension and rate, 16; and rapidity, 16; and articulation, 27;

emphasis in second and third grades, 60; plans for improving, 168; three main forms of, 172; an experiment in factual, 174; pupils' difficulties in, 179; of organization, training in, 183; of words and phrases, lesson to test and develop, 210; measures of, 226, 230, 235, 238, 241, 243, 277.
Confusion, due to failure in recognition, 9.
Content, problems concerning, 3; of beginning lessons, 39; emphasis on, 65; types in the intermediate grades, 67; in the upper grades, 74, 77, 78.
Content silent-reading lessons, 112, 119.
Content lessons, compared with training lessons, 161.
Content-value, choosing material for, 76.
Contrast, between content and training lessons, 161.
Courtis's silent-reading test, 21, 236.
Criterion for choosing literary units, 75.
Cumulative story, the, 172.
Current events, 77.
Curves of progress in rate — Gray, Courtis, and Starch, 22; O'Brien, 23; significance of Gray's, 69; significance of O'Brien's, 73.
"Cut-up story," the, 108.

"Daffodils," Wordsworth's, 92.
Definite assignments, suggestions upon making, 122.
Developing appreciation, general suggestions upon, 85.
Differences, between oral and silent reading, 117; individual, 69, 282; in rural schools, individual, 294.
Difficulty, and amount, of literary selections, 76.
Dime-novel age, the, 139.
Direction sentences, for silent reading as seat work, 169.
Dramatic audience reading, 106.
Dramatization, problems in silent reading, 152; value of, 153.
Drawing correlation of illustrations with, 148.
Drill work in third-grade silent reading, motivated, 204; on words, 212; on phrases, 56, 161, 213.

Earhart, Lida B., quoted, 80.
Early primer methods, 39.
Eighth grade, problem silent-reading lessons, 135, 149; lesson in outlining, 187; reading exercise in history, 181; silent reading in grammar exercises, 182; books for silent reading, 139, 142; poems to memorize, 96.
Elson Grammar-School Reader, 146, 162.
Emphasis on developing speed and improving comprehension, 69; where to be placed in silent reading, 119.
Environment, introductory reading matter related to the child's, 45.
Errors, types in oral reading, 53.
Examination, Haggerty-Noonan reading, 242, 244.
Experiment, in factual comprehension, an, 174; in relation to rate and comprehension, 16.
Exposition, summing up, 184.
Expression, development of oral, 37; reading with, 53.
Extensive reading, in second and third grades, 59; in middle and upper grades, 66, 74; list of books for class use in, 140.
Eye-movements, importance of, 6; good and bad contrasted, 8; illustrations of, 10, 11, 12, 13; oral reading in relation to, 35, 53; development of proper habits, 55, 162.
Eye-pause, or fixation, 7, 8, 11.
Eye-voice span, the, 14–15.

Factors affecting silent reading, 19; in the development of speed, 20.
Factual comprehension, an experiment in, 174.
Factual questions, 172.
Failure to awaken appreciation, causes of, 80.

Fifth grade, illustrative silent-reading lessons in, 128, 165, 185, 192; book for silent-reading lessons, 141; illustrative problems, 144; silent-reading test of rate and comprehension in, 274.
First grade, silent reading in the 58; Pressey-Skeel group test for measuring reading vocabulary in, 249.
Fixation, or eye-pause, 7, 8, 11.
Formulation of problems, importance of, 123.
Fourth grade, radically different methods in, 64; a dramatic audience-reading lesson in, 106; illustrative silent-reading lessons in, 125, 126, 157, 164, 184, 289; illustrative problems, 144; illustration of cuttings, opposite 150; silent-reading test in, 265; classes regrouped for reading, 288.
Freeman, F. N., quoted, 26, 44.

Game, drill, 205.
Gardenville School, St. Louis, results of use of tests, 254.
General method, of appreciation lesson, 84.
Geography, silent-reading lesson in sixth grade, 180.
Grades, problems in second and third, 54; silent reading in first and second, 58; extensive reading in second and third, 59; extensive reading in middle and upper, 66; variability in reading attainment in upper, 74; books for class-room use in extensive silent reading, 140; Haggerty-Noonan test for primary, 242.
Grammar exercises, silent reading in, 182.
Gray, C. T., quoted, 30.
Gray oral-reading test, 219.
Gray, Dr. William S., quoted, 22, 49, 52, 60, 64, 112, 114, 293.
Group reading, 155; special plans for, 156.
Group Tests, 253.
Group, the forward, 287.
Group work, in making paragraph headings, 190.
Grouping, special, 285.
Group-to-group audience reading, 101; recitation, 103.

Haggerty-Noonan reading examination, 242, 244.
Haliburton and Smith, referred to, 87, 90, 99.
Headings, making and matching, 190; training in reading newspaper, 190.
Hearing — reading tests, 223.
History, silent reading exercise in, 181.
Holley sentence vocabulary scale, 249.
Holton Primer, 170.
Horn, Ernest, referred to, 117.
"How I Killed a Bear," Warner's, 131.
Huey, E. B., referred to, 6, 28.
Humorous, appreciation of the, 83.

Illustrated audience reading, 108.
Illustrating nursery rhymes, directions for, 207.
Illustration, selection of units suitable for, 151.
Illustrations, types of, 147; purposes of, 147; correlated with drawing, 148.
Illustrations made by groups of pupils, reproductions, opposite 150.
Illustrative silent-reading lessons, 125, 128, 131, 135.
Importance of oral reading, in the lower grades, 33.
Improvement, through use of tests, 254.
Improving comprehension, plans for, 168.
Increase of rate, re-reading for, 161, 166; devices for, 161–168; O'Brien's types of training for, 167.
Individual and group-reading, 155–159.
Individual differences, 69, 282; in rural schools, 294.
Individual needs, grouping by, 70, 284.

Individual Tests, 254.
Informational material, 67, 77, 172.
Inner speech, the natural tendency to suppressed tone in silent reading, 26.
Interesting books for boys, lists reported by largest cities, 139.
Interest, problem of securing, 4.
Intermediate and Upper Grades, teaching reading in, 64.
Intermediate grades, oral reading in, 70, 77; summary of work in teaching reading, 71; literature chosen for, 75; Haggerty reading examinations for, 243; variability in, 282.
Iowa City silent reading exercises, 209.

Jenkins, Frances, referred to, 28, 30.
Jones vocabulary test, 222.
Judd, Charles H., 9, 16, 69, 115, 199, 258, 282, 293.

Kendall and Mirick, quoted, 59, 62, 77, 113, 115.

Language Response Cards, 205.
Lessons in community and national life, 77, 288.
Lewis and Roland Silent Readers, 200.
Library, use of room, 159.
Listening powers, how to test, 223.
Lists, of poems for memory work, 93; of books for group-to-group audience reading, 105; of books most popular with boys, 139; of books for class use in extensive reading, 140; of selections for silent reading, arranged by grades, 142.
Literature, appreciation of, 5; choice of, in intermediate grades, 75.

McCall, William A., referred to, 241.
McMurry, F. M., quoted, 124.
"Magic Mask, The," 274.
"Man without a Country, The," Hale's, 135.
Meaning, expression in first grade, 53; association of, 91; training to grasp essential, 193.
Measurement, Burgess theory of, 230.
Measuring comprehension, 226, 230, 235, 238, 241, 243, 277.
Measuring rate, 227, 235, 238, 276.
Measuring understanding of sentences, Thorndike scale, 240.
Memorization, 80, 90; lists of poems for, 93.
Merrill Fourth Reader, 152.
Merrill Primer, the, 43, 44.
Method, early primer, 39; of appreciation lesson, 84; in teaching poetry, references for, 87; in teaching memorizing, 90; memorizing, contrasted, 91; combined, 92.
Monroe, W. S., referred to, 20, 178, 259.
Monroe Standardized General Survey Silent-Reading Tests, 225.
Monroe Standardized Reading Tests, 206.
Mother-Goose type of primer, 42.
Motivated drill work in silent-reading, third grade, 204.
Motivation, 4.

National life, readings in, 77.
Natural Method Primer, 42.
Natural Method Readers, 88.
Nature of appreciation, the, 81.
Nature phenomena, appreciation of, 84.
Newspaper headings, training in reading, 190.
Newspapers, class exercise with, 191.
Norms, comparison of rate, 21.
Notes, making running, 189.
Nursery-rhyme type of primer, 43.
Nursery rhymes, directions for illustrating, 207.

O'Brien, Dr. John A., conclusions as to effect of increased speed upon comprehension, 18; quoted, 72, 167.
One-word response cards, 205.
Oral and silent reading, relation between, 15; relative value of, 33; essential differences between, 115, 117.

Oral exercise in English, 182.
Oral reading, a slower process than silent, 24; importance of, in lower grades, 33; poetry, 35; social value of, 36; errors in, 53; types of, 55, 99; in the intermediate grades, 70, in the upper grades, 77; over-emphasis of, 114.
Oral-reading stage, the, 52.
Oral reading test, Gray's, 219.
Organization, training in comprehension of, 183–195.
Outline, specimen of, 192.
Outlines, 184, 187.
Over-emphasis of oral reading, 114.

Paragraph cards, 214.
Paragraph headings, making and matching, 190.
Parker, S. C., referred to, 91.
Pauses per line, 9.
Perception in reading, visual, 27.
Perspective view of whole poem, 87.
Phonetic rules, 212.
Phonic drill, the danger in, 51.
Phonics, 49–51.
Phrase-flashing, 56, 161, 213.
Phrases, drill on, 213.
Pintner, R., referred to, 26.
Plans, for the silent-reading lesson, 119; for grouping, 156; for improving comprehension, 168.
Poems, in oral reading, 35; studied by parts, 88; for memory work, lists of, 93.
Poetry, the teaching of, 87.
Poor method in silent reading, 129.
Poor reading habits, the result of undesirable type of lessons in school, 113.
Pressey-Skeel group test, first grade, 249, 252.
Pretense cards, 205.
Primary stage, the, 52.
Primary grades, Haggerty-Noonan test for, 242.
Primer, the simple-story, 40.
Primer methods, 39.
Primers, summary of conclusions regarding, 44.
Problems in reading instruction, 2; of the beginning stage, 38; of second and third grades, 54; characteristic of good, 120; formulated by pupils, 123; illustrative statement of, 131; solution, 132.
Progressive Road to Reading, 41.
Pronunciation, ten phonetic rules of, 212.
Proportion of time, given to silent reading, 115–116.
Pupils, formulation of problems by, 123.
Purposes of training lesson, 161.

Questions, difficulties in formulating test, 265.
Questions and answers, specimen, with criticism, 269, 271.
Questions in reading tests, score values of, 273; specimen comprehension, 277.
Questions, problem and factual, 120.

Rapidity and comprehension, 16.
Rate, and comprehension, 16, 18; of reading, standards in, 20; of silent reading, 19; and articulation, 27; in oral reading, 52, 221; devices for increasing, 161–168; re-reading for increase of, 166; methods of measuring, 227, 235, 238, 276.
Rate norms, comparison of the O'Brien, Gray, Courtis, and Starch, 21.
Reading to pupils, 110.
Reading ability, individual differences in, 282.
Reading tests, 217; selection of, 253; score value of questions in, 273; in rural schools, 279; in second-grade, 290.
Reading-Literature Primer, the, 40.
Recall, as a factor in memorizing, 92.
Records, time on reading outside of recitation, 166.
Red-blooded material, value of, 138.
Regressive movements, of the eye, 9.
Relation between oral and silent reading, 8, 15, 25, 33.
Relational questions, proper statement of, 176.

Relational thinking, [illegible]
Relationship between wor[illegible] pupils in, 202.
Remedial instruction, 2[illegible]
Remedial training work, type[illegible] 212.
Remedial treatment, suggested by study of tests, 258.
Representation, problems of illustrative, 147.
Reproduction and silent reading, 171.
Re-reading, for increase of rate, 166; verifying answers by careful, 178.
Results in reading, more satisfactory in primary than in middle and upper grades, 1.
Rhythmical movement, of the eye in reading, 9.
"Rip Van Winkle" an illustrated eighth-grade lesson, 149.
Riverside Readers, 88.
Riverside Primer, the, 40, 44, 61.
Riverside First Reader, the, 61.
Riverside Fourth Reader, 126, 164, 265.
Riverside Fifth Reader, 165, 274, 288.
"Robin Hood," series of silent reading lessons in, 128.
Room, special grouping within a, 285.
Room library, use of, 159.
Rugg, H. O., referred to, 274.
Rules of pronunciation, listing words according to phonetic, 212.
Rural schools, use of reading tests in, 279; individual differences in, 294.

St. Louis, Course of study in reading, 36, 60, 110, 114; report of school survey, 16, 53, 112.
Scale, of reading ability for first four grades, 208.
Scale, Holley sentence vocabulary, the, 249.
Scale, Thorndike-McCall, the, 240.
Scales, Thorndike visual vocabulary, 246.
Schmidt, W. A., referred to, 8.
Schmitt, Clara, referred to, 292.
Score values of questions, in reading tests, 273.
[illegible]ork, 1[illegible].
[illegible]de, silent reading in, 58; [illegible] reading in, 59; improvement-reading test in, 259.
Second and third grades, main problems in, 54.
Second-grade classes specially grouped for reading, 290.
Selection of poems, the, 97.
Selections for silent reading, arranged by grades, 142.
Sentence vocabulary scale, Holley, 249.
Series, of fifth-grade silent reading lessons, illustrative, 128; of eighth-grade recitations, 135.
Seventh-grade, silent-reading lessons in, 131, 151, 197; study of regrouping of two classes in, 285; books for silent reading lessons, 141; illustrative problems, 145; poems to memorize, 96.
Sharp, Dallas Lore, nature series, 104.
Silent reading, 58; importance emphasized, 2; exercises in latest type, 204; Cedar Rapids and Iowa City, exercises in, 209; rate of, 19; should predominate in the middle grades, 64; training in, 68, 130; extensive, 74; proportion of time given to, 115; method, more than training exercises, 117; group work in, 155; individual, 157; and reproduction, 171; in grammar exercises, 182; factors in testing, 224; Monroe, tests in, 225; Burgess scale for measuring ability in, 230; Gray, tests in, 234; Courtis's test in, 236; improvised test, for second grade, 259; fourth-grade test, 265; rate and comprehension, fifth-grade test in, 274.
Silent-reading lessons, in primary grades, 58, 169, 207, 209; classfied, 118; third grade, 204; fourth grade, 125, 126, 157, 164; fifth grade, 128, 185, 192; sixth grade, 174, 180, 186, 189, 198, 200; illustrative, seventh grade, 131, 151, 197; illustrative, eighth grade, 135,

LB
1573
S84
c.5

29658

JAMES C. KIRKPATRICK LIBRARY - UCM
3 7250 04237335 5